Virginia Economic Indicators

U.S. 2008 Estimates and 2009-2011 Projections and Virginia Third Quarter 2008 Data with Year-end Area Projections

Feature Articles:

The Professional and Technical Services Sector in Virginia
by James P. Wilson

Trends in Defense Employment 1997-2007
by James P. Wilson

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VIRGINIA
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VIRGINIA EMPLOYMENT COMMISSION

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Foreword

For those who are interested in studying the business cycle, the *Virginia Economic Indicators* publication is designed to depict the movement of the key economic indicator series readily available in Virginia. Most of these series are published elsewhere; but here, they are brought together in both graphic and tabular form, under one cover, and grouped so that they may be analyzed and interpreted easily.

Ten of the fourteen series currently used—the two employment series, the four unemployment series, and the four hours and earnings series—are produced in-house by the Economic Information Services Division of the Virginia Employment Commission and are comparable to similar national series produced by the U.S. Department of Labor. The four business indicators are provided by sources outside of the agency (see the Historical Summary at the back of this publication for data sources) and should prove useful to the student of business cycle development in Virginia.

All series currently published in the *Indicators* have been seasonally adjusted to minimize regular seasonal fluctuations in the data in order to show only activity related to the business cycle. The *Virginia Economic Indicators* is currently the only seasonally adjusted publication of some of the Virginia series.

From time to time, new series will be added to this report as the data becomes available and is collected and tested. Also, series presently provided, if necessary, may be discontinued. Historical graphs are published in the back of the fourth quarter issue for each year.

This publication provides a narrative analysis update of the U.S. economy, a narrative analysis of recent changes in Virginia, and highlights of both economies. Also, feature articles dealing with some currently important aspects of the Virginia economy are presented. Feature articles are written in-house or by guest authors knowledgeable on particular economics-related subjects.

This publication is normally produced quarterly in April, July, October, and February, but data in the series is provided on a monthly basis. There is a time lag of one quarter before all the data series are available for publication and analysis.

With the 2002 benchmarks in 2003, all states were required to switch to the North American Industry Classification System (NAICS) codes which replace the Standard Industrial Classification (SIC) codes formerly used. The NAICS codes were updated in 2007. The NAICS conversion affects the factory employment series and the four hours-and-earnings series in that, where 2001 - 2008 data has been revised to NAICS, data prior to this time is still on the old SIC basis with more manufacturing industries. This means a slight break in these series when comparisons are made with former periods prior to 2001.

The main change to manufacturing is that, under NAICS, newspapers and publishing houses are no longer included in manufacturing, and so their employment and earnings are missing from revised 2001 - 2008 data.

The U.S. forecast analysis is based on the Global Insight projections which the state purchases. Virginia projections use the state model with enhancements from VEC data for the areas.

Significant advances in printing technologies and the competitive bidding process allowed the production of the current format with its enhancements on an annual contract basis at a substantial cost savings over the previous process and format.

Production and distribution of the *Virginia Economic Indicators*, like most Virginia Employment Commission projects, are financed through specifically-earmarked U.S. Department of Labor grants and do not use Virginia state funding sources.

We welcome any comments, suggestions, or questions concerning *Virginia Economic Indicators*.

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For additional information or explanation of the contents of this document, you may contact the Economic/Operations Research section at (804) 786-5669. You may also view the publication in its entirety at **http://www.VaWorkConnect.com > LMI Home > Publications.**

Highlights

The U.S. and Virginia Economies

The U.S. economy is already in what likely will prove to be the longest recession since the depression of the 1930s with not many signs of recovery before 2010. The economy got here because of the crises in the housing and financial markets and a wildly fluctuating energy market. The composition of the aging U.S. labor force and low birth rates in the 1970s and 1980s will probably keep unemployment below 10 percent, but the service-based economy will recover very slowly, not getting back to many levels achieved at mid-decade for several years. Steps are being taken to resolve many of the mortgage, financial, and energy problems and prevent their reoccurrence in the future, but a massive deficit likely will have been incurred in the process. Paramount to recovery are achieving a floor under home prices and restoring liquidity to the banking system.

Third Quarter 2008 Virginia data occurred and was recorded mostly before the big new problems in the national financial sector fully surfaced. As a result of this timing, third quarter Virginia data does not look too bad. The 14 Virginia series that are available started off strong, but waned as the quarter aged, perhaps foretelling the national problems starting to surface. Nevertheless, the Virginia series set the following third quarter positive records: Nonagricultural employment increased to highs of 3,779,600 in July; 3,782,200 in August; and 3,786,100 in September; average hourly factory earnings reached highs of $18.61 in July and $18.75 in August; and average weekly factory earnings achieved highs of $809.98 in July and $822.67 in August.

Virginia appears to average 14,400, or 0.4 percent, job growth in 2008 **on a preliminary basis before spring 2009 benchmark revisions**. Virginia still added jobs in 2008 whereas national job growth had shifted to negative. Virginia's unemployment rate for 2008 appeared to average 4.1 percent **on a preliminary basis.**

At least eight of the nine Virginia metropolitan areas for which data is currently published are projected to average positive job growth in 2008. Only **Blacksburg-Christiansburg-Radford** is expected to average neutral to negative job growth for 2008 because of layoffs in its heavily motor-vehicle-oriented manufacturing sector. Even here by year's end, job growth at the two large state universities in the area, Virginia Tech and Radford, was negating the factory job losses. In 2008, job growth in the three-largest metropolitan areas was still running above the 0.4 percent statewide average, but had slowed markedly in **Northern Virginia** and the **Richmond** area because of job losses in construction, finance, and manufacturing. The **Virginia Beach-Norfolk-Newport News, Virginia/ North Carolina** metropolitan area continued to grow, supported by its large military and defense infrastructure as is usually the case in slower times. The **Lynchburg** area saw fairly good job growth in 2008 because of expansions at its several dominant private colleges. Also,

National economic problems began to overwhelm, but as usual, Virginia's performance was much better than the nation's.

growth at their dominant state university employers benefited the **Harrisonburg** and **Charlottesville** areas as well as the **Richmond** and **Hampton Roads** areas. The **Winchester, Virginia/West Virginia** area still benefits from the spillover of strong services growth from its large **Northern Virginia** neighbor. The **Roanoke** area's main job expansion came from health care. With the nine metropolitan areas showing more job growth than the state as a whole, the rural **balance-of-state** suffered net job losses.

The Consumer Price Index for the United States for All Urban Consumers (CPI-U) averaged 219.3 (1982-84=100) in Third Quarter 2008. This was a 1.2 percent rise from the 216.8 average for Second Quarter 2008. The Third Quarter 2008 CPI-U average was 5.3 percent greater than the Third Quarter 2007 average of 208.2. Energy and commodity prices peaked early in Third Quarter 2008.

According to the Bureau of Labor Statistics of the U.S. Department of Labor, productivity in the nonfarm business sector rose at a 1.3 percent annual rate in Third Quarter 2008, slower than the 2.1 percent rate over the last four quarters, and slower than the trend rate of 2.5 percent per year from 2000 to 2007. As revised, output fell 1.9 percent and hours fell 3.1 percent in Third Quarter 2008; the two measures had not declined as quickly since Third Quarter 2001 and First Quarter 2002, respectively. Hourly compensation in the nonfarm business sector rose 4.1 percent in Third Quarter 2008. This rate is similar to trends in recent years; hourly compensation grew between 3.6 percent and 4.1 percent each year since 2001. Real hourly compensation decreased 2.4 percent in nonfarm business during the third quarter, due to the increase in consumer prices. Nonfarm business unit labor costs increased 2.8 percent in Third Quarter 2008. Over the last four quarters, unit labor costs increased 1.4 percent. The implicit price deflator for the nonfarm business sector rose 4.9 percent in third quarter, more than in any quarter since Third Quarter 1982 (5.0 percent).

According to the Energy Information Administration of the U.S. Department of Energy, Virginia's coal production in the first nine months of 2008, at 18,108,000 short tons mined, was 9.9 percent below the 20,099,000 short tons mined in the similar nine-month period in 2007. Production problems at a major producer early in the year largely caused the difference.

William F. Mezger

William F. Mezger, Chief Economist
Virginia Employment Commission

Forecast Update—2008 Estimates and 2009 - 2011 Projections

William F. Mezger, Chief Economist

The forecast for 2008 had been—the U.S. economy would have a period of little growth in the first half of 2008, but because of fixes of the financial problems by the Federal Reserve in the form of lower interest rates, recession would narrowly be avoided. By the time of the national presidential election in November 2008, the economy was expected to be on the upswing. That forecast stated "the big problem is any kind of further shock to the economy could probably tip the balance toward recession." Unfortunately, the economy suffered a number of shocks in 2008.

- When the U.S. Department of Commerce revised the Gross Domestic Product (GDP) numbers for 2007 and several previous years, as it usually does in the summer, it was found that economic performance in this decade was not as good as earlier believed. (GDP is the sum of the output of all the goods and services produced by labor and property in the U.S. economy and is the key measure of economic gain or loss.) The revisions showed GDP grew at only a 2.0 percent rate in 2007, and 2004, at 3.6 percent growth, was the only year so far in the decade to have above 3.0 percent trendline growth.
- World oil prices started rising from less than $100 per barrel, skyrocketing to $147 per barrel by July. The sharp spike was much higher than the supply/demand situation would appear to warrant, but the rise was driven by speculation and high anticipated demand. Oil prices nosedived once the China Olympics and the summer driving season were over, but not before world and especially the U.S. demand for vehicles had been significantly altered. In the U.S., the sales of light vehicles plummeted from 16.1 million units in 2007 to only 10.1 million units annualized by November 2008, and the Big Three domestic auto producers—General Motors, Ford, and Chrysler—were on the verge of collapse.
- U.S. financial markets imploded in August and September 2008 in spite of efforts all year by the Federal Reserve to remedy things.
  - The Federal Reserve had:
    - Forced the sale of Bear Stearns investment banking house.
    - Opened its discount lending to investment banks.
    - Dropped the Fed Funds rate from 5.25 percent in September 2007 to 2.00 percent by spring 2008.
    - Allowed investment banker Lehman Brothers to fail.
    - Forced the sale of investment banker Merrill Lynch to Bank of America.
    - Forced the takeover of Washington Mutual Savings by J.P. Mogan Chase.
    - Forced Wachovia to be sold to Wells Fargo.
  - In the meantime, the U.S. Treasury:
    - Took over Fannie Mae and Freddie Mac, the quasi-government mortgage financing companies.
    - Made loans to AIG Insurance, deeming it "too big to fail."
- By late summer 2008, the Federal Reserve, realizing the financial problems were becoming too big for it to handle by itself, sought assistance from the U.S. Treasury. Treasury Secretary, Henry Paulson, and Federal Reserve Chairman, Ben Bernanke, went before the U.S. Congress to ask for legislation for the federal government to buy as much as $700 billion in distressed mortgage-backed assets to prevent the financial system from failing.
- The emergency of the situation caused Congress to act—the Troubled Assets

The Troubled Assets Relief Program (TARP), passed in October 2008, enacted unprecedented legislation for the government to buy as much as $700 billion in distressed mortgage-backed assets to prevent the financial system from collapsing.

Relief Program (TARP) was passed in October 2008. TARP enacted unprecedented legislation for the government to buy as much as $700 billion in distressed mortgage-backed assets to prevent the financial system from collapsing.

- The legislation allows the U.S. government to purchase discounted and distressed assets from the banking system. This, hopefully, will create liquidity and put a bottom under the housing market while reducing investor uncertainty. It will help restore confidence in the financial system and enable financial institutions to raise capital and expand credit to promote growth.

- While the financial markets were in turmoil, a national presidential election was going on. The Democratic candidate, Barack Obama, was elected the 44th U.S. President on November 4, 2008; and the Democratic party gained a fairly big majority in both houses of Congress.
- The natural difficulties of transition between the outgoing Bush administration and the new in-coming Obama administration, although the two have tried to work together, has undoubtedly complicated and made more difficult the speedy implementation of TARP to rescue the economy.
- The banks have remained very reluctant to lend to promote growth, and some of the monies that were initially supposed to buy up the bad mortgages seemed to now be channeled to loans and assistance to troubled banks and other troubled financial businesses. This process is still evolving—although one-half of the $700 billion of the TARP monies has been spent as we go to press.
- As the economy has continued to worsen, the Federal Reserve in an effort to assist, on December 16, 2008, decided to establish a target range for the Fed Funds rate of 0.0 to 0.25 percent, an unprecedented low. The Federal Reserve has lowered the Fed Funds rate nine times since September 2007.
- Also, in the presidential transition period, General Motors, GMAC financing, and Chrysler also secured TARP loans to tide them over until March 2009 when they will likely attempt to secure more permanent help from the new Obama administration.

2008 in Review

- The signs of the economic slowdown appeared in Fourth Quarter 2007. With revisions, GDP growth in Fourth Quarter 2007 was negative by -0.2 percent. First Quarter 2008 growth was positive by 0.9 percent. Oil and gasoline prices rose.
- Second Quarter 2008 GDP growth was positive by an annual rate of 2.8 percent. The increase reflected strong positive contributions from U.S. exports, consumers' spending of the tax rebate checks, commercial construction, and government spending. The acceleration in GDP growth in the second quarter was aided by reduced imports as consumers cut back on energy purchases (foreign oil).
- Third quarter GDP turned negative by -0.5 percent as the spring's tax rebate checks had passed through the system, oil hit $147 per barrel on world markets in July, and regular gasoline was up over $4.10 per gallon. About the time the summer driving season peaked and the World Olympics took place, oil and gasoline prices started to fall. U.S. exports, which were the main thing holding up GDP growth, started to soften as other world economies also turned down. In spite of efforts all year by the Federal Reserve to contain the mortgage market problems, the financial markets really imploded in August and September.
- Fourth quarter saw the financial problems worsen and Congress pass the emergency TARP legislation, which was at first supposed to buy up the bad mortgages, but now seems more aimed at shoring up the financial institutions and restoring liquidity, which had all but stopped, to commerce. The Federal Reserve continued to drop interest rates, on December 16, lowering the Fed Funds rate to an unprecedented 0.0 to 0.25 percent range. The presidential election took place on November 4, and Democrat, Barack

Obama, was elected by a substantial margin. The presidential transition period was made more difficult, not by a lack of cooperation between the incumbent and president-elect, but by implementation of TARP and the worsening economic situation. Layoffs mounted at year's end; and winter storms, hampering shoppers, made the holiday sales season the worst since 1969. On December 1, the National Bureau of Economic Research (NBER), the Princeton, New Jersey, group that designates recessions in the U.S., did not wait for the usual two quarters of negative growth and declared the U.S. had been in recession since December 2007 because of the unusual strains on the economy. A bright spot—world oil prices fell below $40 per barrel in December and regular gasoline was $1.30 to $1.60 per gallon.

Final Fourth Quarter 2008 GDP numbers will not be available until March 2009, but it now looks like the economy is in free-fall, with GDP being down as much as -5.0 percent and unemployment rising sharply to 7.1 percent (not seasonally adjusted) by December.

Basic economic number averages for 2008 should turn out as follows:

- Economic growth in 2008 should average 1.2 percent GDP gain because of growth in the first quarter (0.9 percent) and, especially, the second quarter (2.8 percent due to the tax rebates). The third (-0.5 percent) and fourth quarters see declines that should pull the annual average down. GDP annual average growth is expected to be positive, although the NBER has now officially said the U.S. recession started in December 2007.

- Consumer spending growth should average only 0.3 percent as consumers burdened by sky-high fuel prices the first half of the year, rising unemployment, and fear over loss of equity in the housing and financial markets bought little other than essentials. The financial market crisis killed many big-ticket purchases as better than half the customers could not get financing. New light vehicle sales were down from an average 16.1 million units in 2007 to a projected 13.1 million units in 2008. New housing starts fell from 1.34 million in 2007 to a projected 0.91 million in 2008, and existing home sales went from 5.67 million in 2007 to a projected 4.86 million in 2008. Business spending also grew less—from 4.9 percent in 2007 to a projected 1.9 percent in 2008. Federal government spending growth was a projected 5.7 percent, up from 1.6 percent growth in 2007. State and local government spending growth fell from 2.3 percent in 2007 to a projected 1.2 percent in 2008 as tax revenues began to dry up with the weakening economy.
- The Federal Reserve reduced the Fed Funds rate, going from 4.25 percent in December 2007 to a 0.0 to 0.25 percent range in December 2008 in order to induce more loan liquidity into markets. The Fed Funds rate averaged 1.93 percent in 2008, compared to 5.02 percent in 2007. The Federal Reserve, tried to shore up financial markets, but realizing the financial problems were too big to handle alone, the Federal Reserve teamed up with the U.S. Treasury to beg Congress to enact the TARP legislation.
- Sharp spikes in energy and commodity prices in first, second, and into third quarter pushed up average consumer prices (or inflation) in 2008 to 3.8 percent from a 2.9 percent average in 2007. Consumer prices were dropping by an estimated -9.3 percent in Fourth Quarter 2008, largely because of the drastic fall in energy prices, but the first three quarters kept average inflation for 2008 high.
- Nonagricultural employment in the nation turned negative in Second Quarter 2008 and should show an average job loss of -0.2 percent for 2008. This compared with an average

job gain of 1.1 percent in 2007. Industries with the biggest job losses were construction, manufacturing, finance, and trade and transportation.

- The U.S. unemployment rate moved up from a 4.6 percent average in 2007 to an expected 5.8 percent average in 2008.

The Future

The NBER on December 1, 2008, officially declared the U.S. economy to be in recession, starting in December 2007. The NBER did not wait for the usual two consecutive quarters of negative growth to be confirmed, saying the U.S. economy has been in a weakened state for a year now. The average post-World War II recession period lasted for just over 10 months. With the current recession already one-year old, according to the NBER, this could become the longest downturn since the Great Depression of the 1930s, because at least two to three more quarters, going into 2009, are expected to see negative growth. With the changed composition of the aging U.S. labor force (a labor force that has had to bring in several million foreign workers in recent years just to fill the jobs that needed to be filled), it does not appear that unemployment will top the 10.8 percent level in 1982, although the national unemployment rate is likely to average over 9 percent by 2010. It may be 2012 before national unemployment drops below 8 percent. For recovery to start, home prices have got to bottom out and liquidity needs to be restored to the banking system.

The worst period of the recession should be 2009, but it may be 2012 before national unemployment drops below 8 percent.

Outlook for 2009

- The worst period of the recession should be 2009, with at least two to three quarters of negative GDP growth. GDP growth should average -2.5 percent for the year.

- Consumer spending growth should be negative for at least the first two quarters and average -0.9 percent for the year. Light vehicle sales should further slump to average 10.3 million units. Housing should hit bottom at 0.60 million average new starts and 4.44 million average existing home sales. Declining consumer demand and tight credit will reduce business spending an average -15.1 percent. Federal government spending will be up an average 3.2 percent with monies for the TARP bailout of the banks and motor companies, the wars in Iraq and Afghanistan, extended unemployment benefits, and public works projects to help states and localities. The federal deficit will skyrocket to $1,349 billion. Reduced revenues will cause only a 0.4 percent gain in state and local government spending.

- Oil has been below $40 per barrel and should average $34 per barrel in 2009—bad news for producers, but good news for consumers. There will be a period of deflation with consumer prices averaging -2.2 percent lower. The Fed Funds rate will average only 0.13 percent.

- Job losses will further reduce U.S. nonfarm payroll employment by an average -2.6 percent. Unemployment will rise to average 8.5 percent as more jobs are lost in construction, manufacturing, retailing, finance, and state and local governments.

Outlook for 2010

- GDP will be starting to recover and turning back positive to 2.2 percent average growth.

- Consumer spending will be turning around as the stimulus packages have worked, rising by an average 2.3 percent growth. Light vehicle sales will improve to 12.5 million units as new more fuel-efficient vehicles start to come to market. Housing starts will be slightly better at a 0.98 million average and existing home sales will average 4.52 million. Business spending will still be down with a -0.3 percent loss. Federal government spending will fall to -0.7 percent as Iraq winds down and much of the recovery package has already been spent. State and local government spending will be up 2.9 percent as revenues start to improve and federal public works funds are spent.

- Consumer prices will be starting to rise again, but inflation will be modest at only 2.3 percent. With the deflation risk over and the economy starting to improve, the Fed Funds rate will average 0.94 percent. World oil prices will be inching higher, but still averaging a reasonable $51 per barrel.

- Nonfarm employment will bottom out with 0.0 percent growth. Service-based economies grow more slowly in recoveries than do manufacturing-based economies. Unemployment, always a lagging indicator that is worse in the year after the downturn, will be 9.1 percent.

Outlook for 2011

- The economy will be nearer to recovery with average 3.2 percent GDP growth, the first year since 2004 with growth above the 3.0 percent long-range trend line. Consumer spending will still be up 2.3 percent. New light vehicle sales will be up to an average 14.5 million units. The housing market will be reviving with average new starts up to 1.34 million and average existing home sales reaching 4.93 million. Business spending will be rising an average 12.7 percent. Federal government spending should drop -2.0 percent on average as the Middle East situation improves and the stimulus packages phase out. State and local government spending will rise an average 0.2 percent. Tax revenues will be better, but federal aid to states and localities will be waning.

- Inflation with recovery will average 3.4 percent. The Federal Reserve will have shifted to fighting inflation again with a Fed Funds rate averaging 3.34 percent. World oil prices will be creeping higher to average $77 per barrel as world demand increases.

- Nonfarm employment should increase an average 1.6 percent, and unemployment will be receding to an average 8.5 percent rate.

The baseline forecast has a 60 percent probability.

Major Assumptions

- The events of the last eighteen months have proven a real challenge for the Federal Reserve's normally well-managed monetary policy. The U.S. financial markets imploded in August and September 2008 in spite of efforts all year by the Federal Reserve to remedy things. The Federal Reserve had dropped the Fed Funds rate from 5.25 percent in September 2007 to 2.00 percent by spring 2008. These financial market problems came from the low lending rates to stimulate the economy from 2001 to 2004, and lax lending requirements allowed financial institutions to promote home buying to consumers who really could not afford it in order to make huge profits for the financial institutions. There was much speculation in residential real estate. With rising interest rates from 2005 to 2007, many buyers found they could no longer pay rising adjustable rate mortgages, and they now owed more on the property than it was worth, so they just walked away, letting the financial institutions take over. As this happened, the financial institutions found they also had more money tied up in properties that were worth less than the loans. As the situation worsened through 2008, the financial institutions became more and more unsure and reluctant to lend to even the best borrowers. By late summer 2008, the Federal Reserve, realizing the financial problems were becoming too big for it to handle by itself, sought assistance from the U.S. Treasury. The Treasury and Federal Reserve went before the U.S. Congress to ask for legislation for the federal government to buy as much as $700 billion in distressed mortgage-backed assets to prevent the financial system from failing. The emergency of the situation caused Congress to act, and the Troubled Assets Relief Program (TARP) was passed in October 2008. The Federal Reserve, on December 16, 2008, decided to establish a target range for the Fed Funds rate of 0.0 to 0.25 percent, an unprecedented low. The Federal Reserve has lowered the Fed Funds rate nine times since September 2007. The Federal Reserve has, at the end of 2008, pretty much run the course of its conventional methods to control the economy. It will likely keep the Fed Funds rate at the 0.0 to 0.25 percent range for all of 2009. The Fed Funds rates likely will average 0.13 percent for 2009; 0.94 percent for 2010; and, with some tightening by then, 3.34 percent by 2011.

- Fiscal policy in recent years has taken something of a backseat to monetary policy, but this time because the Federal Reserve has largely already used up most of its bag of tricks to bring the economy in line, fiscal policy will have to be the primary means to get the U.S. economy out of crisis. Federal government spending only grew by 1.6 percent in 2007. By 2008, federal government spending rose by a projected 5.7 percent. This federal spending increase was first to pay for the surge in Iraq, in order to improve that situation, and to provide the rebate checks to U.S. taxpayers in the second quarter, with the goal being to boost U.S. GDP growth. The tax rebate checks to some extent worked, boosting GDP growth by 2.8 percent in the second quarter, but the worsening economic news scared consumers away from spending for the intended purpose of boosting economic growth. By Third Quarter 2008, GDP growth turned down by -0.5 percent. As more and more problems in the nation's financial markets came to light in late summer, the U.S. Treasury was forced to:

    - Take over the quasi-government mortgage financing companies of Fannie Mae and Freddie Mac.

    - Loan American International Group, Inc. (AIG Insurance) $85 billion in return for 80 percent ownership.

  By late summer 2008, the Federal Reserve, realizing the financial problems were becoming too big for it to handle by itself, sought assistance from the U.S. Treasury. The Treasury and Federal Reserve went before the U.S. Congress to ask for legislation for the federal government to buy as much as $700 billion in distressed mortgage-backed assets to prevent the financial system from failing. The Troubled Assets Relief Program (TARP) was passed in October 2008. This all-encompassing legislation gives the U.S. government broad authority to purchase soured mortgage-related assets from U.S. financial institutions for the next two years. The natural difficulties of transition between the outgoing Bush administration and the new in-coming Obama administration, although the two have tried to work together, has undoubtedly complicated and made more difficult the speedy implementation of TARP to rescue the economy. The banks have remained very reluctant to lend to promote growth, and some of the monies that were initially supposed to buy up the bad mortgages seemed to now be channeled to loans and assistance to troubled banks and other troubled financial businesses. This process is still evolving—although one-half of the $700 billion of the TARP monies has been spent as we go to press. Also, in this presidential transition period, the Big Three domestic automakers sent executives to Congress to ask for loan assistance to keep them afloat until more fuel-efficient vehicles can be developed. After twice being rebuffed for loans by Congress (Ford dropped out of the quest along the way), they now have asked outgoing President Bush for loans from TARP to tide them over until March 2009, after the new Obama administration has taken office. President Bush agreed. Even before he was sworn into office on January 20, 2009, President Obama asked Congress for speedy passage of his proposed massive recovery package (probably about $825 billion—it is still evolving) to fix the sagging economy. It looks like this economic rescue package will be in the form of tax rebates, transfer payments (extended unemployment benefits), and public works spending. The goal is to put people back to work quickly—creating 3 million jobs. President Obama has urged enactment by mid-February 2009. The TARP and the proposed recovery package will add tremendously to the federal budget deficit with it rising from $162 billion in 2007 to a projected $455 billion in 2008, $1,349 billion in 2009, $987 billion in 2010, and $837 billion in 2011.

  State and local governments will face challenging times since they have to have balanced budgets by law. The state

President Obama asked Congress for speedy passage of his proposed massive recovery package.

and local governments' main savior will be federally funded capital spending as part of the recovery package. Combined state and local government spending is expected to increase 1.2 percent in 2008 (still running on previous revenues), 0.4 percent in 2009, 2.9 percent in 2010 (federal recovery package monies pass through the system), and 0.2 percent in 2011.

- National nonagricultural payroll employment (the job count) rose at an average 1.1 percent in 2007, reaching a level of 138 million jobs in December 2007 as the business cycle peaked. Average job loss in 2008 is projected at -0.2 percent. Nonfarm employment nationally is expected to recede -2.6 percent in 2009, be unchanged in 2010, and start to advance at a 1.6 percent rate in 2011. A characteristic of service-based economies is that they grow slowly.

- The national unemployment rate, a lagging economic indicator, averaged 4.6 percent in 2006 and 2007. Unemployment is expected to average 5.8 percent in 2008 and move up to average 8.5 percent in 2009 and 9.1 percent in 2010 (unemployment is usually highest the year after the recession ends because it takes time for the displaced to be rehired). Unemployment should be receding in 2011 to 8.5 percent.

- Recently declining interest rates and slower growth in the U.S. had been reducing the value of the U.S. dollar. This made imported goods more expensive to U.S. consumers, but it greatly improved the competitive position of U.S. goods producers. After mid-2008, the rest of the world quickly followed the U.S. into recession as the financial markets imploded. Worldwide, the recession is likely to be the worst since the 1930s.

- The averages for 2008 are expected to be 0.91 million housing starts and 4.86 million existing home sales, down significantly from 2.07 million housing starts and 7.08 million existing home sales at the peak in 2005. Hopefully, 2009 will see a bottoming out at 0.60 million average housing starts and 4.44 million average existing home sales; 2010 should see recovery to 0.98 million average housing starts and 4.52 million average existing home sales; and 2011 should have 1.34 million average housing starts and 4.93 million average existing home sales. For the economy to really recover, two things need to happen:

  1. A floor needs to be put under plummeting home prices, which have dropped nationally by 20 percent from 2005 to 2008 and are expected to fall another 15 percent in 2009. The loss of equity in home values has caused consumers to stop spending for big-ticket durables.

  2. Liquidity needs to be restored to financial markets so lending and normal commerce can resume. In recent months, over half of the prospective home and car buyers could not get financing.

- U.S. light vehicle sales are now projected to average 13.1 million units in 2008, 10.3 million units in 2009, 12.5 million units in 2010, and 14.5 million units in 2011. The domestic producers need at least a 14 to 15 million unit sales volume to stay in business.

- World oil prices averaged $100 per barrel in 2008 because of price spikes in the first-half of the year. World oil prices are now projected to average $34 per barrel in 2009, $51 per barrel in 2010, and $77 per barrel in 2011. The recession has dropped oil prices for now, but reviving world demand will eventually nudge prices higher. As always, the energy sector can quickly become very volatile.

Forecast Alternatives

The **pessimistic scenario** has a long and deep worldwide recession (probability is 20 percent).

The **optimistic scenario** has monetary and fiscal stimulus working better than expected (probability is 20 percent).

January 28, 2009

For the economy to recover:

1. A floor needs to be put under home prices.

2. Liquidity needs to be restored to the financial markets.

Virginia Indicators

Third Quarter 2008 Data with Year-end Area Employment and Jobless Projections

William F. Mezger, Chief Economist

As in the nation, Third Quarter 2008 Virginia data occurred and was recorded mostly before the big new problems in the national financial sector fully surfaced. As a result of this timing, third quarter Virginia data, while still plagued by record-high fuel prices, but benefiting from the last of the spending of the spring tax rebate checks, does not look too bad. The 14 series that are available to measure Virginia's economic performance, started off strong, but waned as the quarter aged, perhaps foretelling the problems that were starting to surface in the financial markets that would eventually spread to other sectors.

- July was, by far, the best month with nine series up, three unchanged, and two down.
- By contrast, August had only four series up, two unchanged, and eight down.
- September was slightly better with five series up, three unchanged, and six down.

Even with financial sector problems starting to surface, the Virginia economy managed to set the following positive all-time highs in the third quarter:

- Seasonally adjusted nonagricultural wage and salary employment buoyed by still good growth in private education and health care, professional and business services, and total government managed to creep forward to new absolute highs each month of the quarter with 3,779,600 in July, 3,782,200 in August, and 3,786,100 in September.
- Hourly average factory earnings reached new highs of $18.61 in July and $18.75 in August.
- Weekly average factory earnings achieved new heights of $809.98 in July and $822.67 in August.

Both factory wage series were still benefiting from production for export, before it waned in the fourth quarter.

Signaling a worsening economy:

- The total unemployment rate, at 4.6 percent in August, was the highest in five years.
- Initial unemployment claims, at 7,112 in September, were a five-year high.
- Unemployment insurance final payments, at 5,094 in September, were a five-year high.
- New business incorporations, at 1,106 in August, were a 25-year low.
- New light vehicle sales, at 29,407 in August, were the lowest in 16 years.

The six-month moving average of rising indicators on page 23 serves to illustrate the quarter's performance. The moving average enhances analysis because it smoothes out much of the irregularity present in many of the individual series.

Around the State

Virginia appears to average 14,400, or 0.4 percent, job growth in 2008 on a **preliminary basis before spring 2009 benchmark revisions**. Virginia was still adding some jobs in 2008 whereas national job growth had shifted to negative with a **preliminary** 0.2 percentage point job *loss*. Virginia's job growth average was kept positive by still good gains in private education and health care, total government, professional and business services, leisure and hospitality, and miscellaneous services. Virginia job growth did eventually turn negative, but it was not until the very end of the year, in December 2008. After averaging 3.0 percent in both 2006 and 2007, the unemployment rate in Virginia has risen in 2008 and averaged 4.1 percent **on a preliminary basis**. The increase was mostly from manufacturing and construction layoffs.

Third quarter Virginia data, which occurred before the nation's big financial sector problems fully surfaced, does not look too bad with record nonfarm employment and some record wage figures.

At least eight of the nine Virginia metropolitan areas for which data is currently published are expected to average positive job growth in 2008. Only **Blacksburg-Christiansburg-Radford** is expected to average neutral to negative job growth for 2008 because of layoffs in its heavily motor-vehicle-oriented manufacturing sector. Even here by year's end, job growth at the two large state universities in the area, Virginia Tech and Radford, was negating the factory job losses. In 2008, job growth in the three-largest metropolitan areas was still running above the 0.4 percent statewide average, but had slowed markedly in **Northern Virginia** and the **Richmond** area because of job losses in construction, finance, and manufacturing. The **Virginia Beach-Norfolk-Newport News, Virginia/ North Carolina** metropolitan area continued to grow, supported by its large military and defense infrastructure as is usually the case in slower times. The **Lynchburg** area saw fairly good job growth in 2008 because of expansions at its several dominant private colleges. Also, growth at their dominant state university employers benefited the **Harrisonburg** and **Charlottesville** areas as well as the **Richmond** and **Hampton Roads** areas. The **Winchester, Virginia/West Virginia** area still benefits from the spillover of strong services growth from its large **Northern Virginia** neighbor. The **Roanoke** area's main job expansion came from health care. With the nine metropolitan areas showing more job growth than the state as a whole, the rural **balance-of-state** suffered net job losses. Once again rural areas in the upper half of the state performed better than those in the lower half. The **Martinsville** micropolitan area had the highest unemployment.

- **Virginia Beach-Norfolk-Newport News, Virginia/North Carolina**, the state's second-largest metropolitan area, has a nonfarm employment base of 790,000. This area, which continued to add jobs right on through the 2001 and 2002 recession years, in 2008 appears to add the most average new jobs (about 2.0 percent, or 16,000), better than the 1.0 percent, or 7,500, job gain in 2007. Hampton Roads always performs better than most other areas in slowdown periods because of the large military and defense infrastructure putting a base under employment. The federal government employs 48,000 civilian workers; defense-oriented professional and business services and shipbuilding employ 106,000 and 23,000, respectively; and there are over 90,000 military stationed in the area. The several state and private colleges and a large health care infrastructure also lend stability. The 90,000-job leisure and hospitality industry added a couple thousand jobs even with "the year after Jamestown" and high gasoline prices at peak season. Hampton Roads was one of the few areas in the U.S. to still see positive construction employment in 2008. The ports did well on exports, although imports were down, and much of the supplies to support the military efforts in Iraq and Afghanistan are shipped through Hampton Roads port facilities. Slight declines in nondefense manufacturing were the only negative. **Unemployment** in Hampton Roads ratcheted up from a 3.2 percent average in 2007 to mid-4 percent now—still good enough to keep this area in the top 5 major U.S. metropolitan areas. The military deployments keep unemployment low because with the military enlisted personnel out of the area, they cannot moonlight and compete for jobs in the local trade and service industries.

- **Lynchburg** has seen about 2.0 percent, or 2,200, average job growth in 2008 to its 112,000 nonfarm employment base. Last year Lynchburg averaged 1.2 percent, or 1,300, jobs added. Much

Virginia is expected to average slight job growth in 2008 in contrast to average job loss in the nation.

This year, Hampton Roads, Lynchburg, and Harrisonburg appeared to have the best job gains.

of this growth has been in the several private colleges and universities and their support industries as college enrollment has increased. The manufacturing sector has lost some employment, and there have been more temporary factory layoffs, which boosted the average **unemployment** rate from 3.4 percent in 2007 to a projected mid-4 percent in 2008.

- **Harrisonburg** continues to be a strong small job market with the anchor James Madison University state government complex and its research and support industries. The area has a stable mix of agricultural products, heavy industry, and a recently added biotech center. Its auto- and foods-centered factory sector had a few problems this year. The area should add over 1,000 jobs to its 66,000 nonfarm base for close to 2.0 percent average job growth. Harrisonburg had little job growth from 2006 to 2007. **Unemployment** is expected to be up from the 2.6 percent 2007 average to about 3.5 percent in 2008, mainly because of factory and construction layoffs.

- **Winchester Virginia/West Virginia** continues to see its economy buoyed by fairly strong service industry growth similar to its large neighbor to the east, Northern Virginia. In the last two decades, the Winchester area has shifted away from its earlier agricultural and manufacturing economic roots to a largely service-based economy. There were some housing-related factory problems this past year. The area should see an average 900 jobs added to its 59,000 nonfarm employment base for about 1.5 percent job growth, although there were fewer retail jobs at year's end. Job growth in 2007 was an average 0.7 percent, or 400 jobs, because of housing-related layoffs. **Unemployment** should rise from a 3.2 percent 2007 average to mid-4 percent for 2008 because of factory and construction layoffs both in the area and in adjacent counties where some area residents work (Winchester is not a perfect labor market).

- **Charlottesville's** 103,000 nonfarm employment base continues to be dominated by the large University of Virginia/University Medical Center, which comprise about one-fifth of employment and the support service industries that go along with them. Job growth seems to have slowed from 3.0 percent last year to average about 1.5 percent for 2008. Layoffs in construction and manufacturing have been the primary reason for the slowing job growth, but budget problems were slowing state institution growth; and the retail sector hired fewer extra workers at year's end. **Unemployment** in this area, which averaged 2.4 percent in 2007, should average just over 3 percent in 2008.

- **Northern Virginia** job growth, which led the state in the 2003 to 2006 period at over 3 percent, averaged 1.2 percent in 2007, and now has dropped to just below 1 percent, averaging about 12,000 jobs added to its 1.3 million nonfarm employment base for 2008. Its still very strong professional and business services sector is expected to provide close to 90 percent of the increase (over 10,000 jobs). Private education and health care, total government, and miscellaneous services are expected to add about 4,000 jobs each to the local economy. Negatives in Northern Virginia now are job losses of 5,000 in construction (the most impacted Virginia area), 2,000 in trade and transportation, 1,500 jobs each in information and finance, and several hundred in manufacturing. Northern Virginia **unemployment** averaged 2.3 percent in 2007 and is expected to average right at 3 percent for 2008. The higher joblessness came from construction, finance, and transportation (airlines). In the national unemployment ranking, Northern

Virginia is not treated as separate from the greater Washington-Arlington-Alexandria, DC/Virginia/Maryland/West Virginia metropolitan area and that larger area was usually the first- or second-best large U.S. metropolitan area in 2008.

- The **Richmond** metropolitan area, which had 1.3 percent average job growth in 2007, should see about 0.5 percent average job growth in 2008, or 3,000 jobs, added to its 635,000 nonfarm employment base. In 2008 the Richmond area has benefited from job increases associated with the on-going expansion of Fort Lee, the opening of one new shopping center and construction of another, and the on-going expansion of recent business arrivals in tobacco and packaging. Its mainstays of public and private higher education and health care continue to expand. The area lost jobs in manufacturing (with Albemarle Chemical Corporation moving its headquarters to Louisiana), finance (the move of Wachovia Securities to St. Louis after a merger), and retail trade. At the end of the year, there were more job losses in manufacturing, finance, and retail headquarters. **Unemployment** in the Richmond area has moved up from a 3.1 percent 2007 average to an expected 4.5 percent average for 2008.

- The **Roanoke** area, which averaged 0.6 percent job growth in 2007, should see about the same rate of growth in 2008, which should add about 1,000 jobs to its 164,000 nonfarm employment base. Most of the growth in both years was coming from expansions at Carilion Clinic as it endeavors to make Roanoke a "world-class" health care center. Roanoke area **unemployment** averaged 3.1 percent in 2007 and should average about 4 percent for 2008.

- The **Blacksburg-Christiansburg-Radford** area, which was down an average 0.7 percent, or 500, in 2007, should see about neutral to barely negative job growth for 2008. Losses from strikes and layoffs in manufacturing related to motor vehicles early in the year should be nearly canceled out by expansions at the two large state universities (Virginia Tech and Radford) and their support industries late in the year. **Unemployment** should rise from a 3.9 percent average in 2007 to average mid-5 percent in 2008.

- With the nine metropolitan areas combined showing an average net 37,600 jobs added and the state as a whole only showing net average job growth of 14,400 jobs, the **non-metro rural balance-of-state** lost an average net 23,200 jobs. As usual, most areas above Interstate 64, as a whole, did better than the rural areas below that highway. Because of federal budget cuts to the statistical programs, Current Employment Statistics data on the **Danville** metropolitan area is no longer available, but it appears the opening of a new furniture factory and service industry expansions provided slight job growth in 2008. Danville area **unemployment**, which averaged 6.3 percent in 2007, should average over 7 percent in 2008. Of Virginia's three micropolitan areas (defined labor markets smaller than a metropolitan area), **Culpeper County** job growth was unchanged in 2008; and unemployment averaged 3.6 percent in 2007 and should average 5 percent in 2008; **Staunton-Waynesboro-Augusta County** added several hundred jobs in 2008 and saw the unemployment average rise from 2.9 percent in 2007 to 4 percent in 2008; and **Martinsville-Henry County** stayed the same in employment even with a furniture factory closing, but saw the jobless average rise from 6.0 percent in 2007 to 9 percent in 2008. The Southwest Virginia coal fields again saw unemployment in the 4 to 6 percent range in 2008.

Arlington County with unemployment below 3 percent consistently had the lowest unemployment in Virginia; and **Martinsville city**, which usually had double-digit unemployment, was consistently the highest jurisdiction.

Employment and wage series look best in the third quarter

Seasonally adjusted nonagricultural payroll employment posted no change (less than the 19,000 change necessary to register plus or minus 0.5 percent) on our pages 22-23 tables for any third quarter month, although nonfarm employment advanced by small increments of 5,000 in July, 2,600 in August, and 3,900 in September. These small gains were enough to register new record-highs each month with 3,779,600 in July, 3,782,200 in August, and 3,786,100 in September. Factory employment also had a small increase of 600 jobs in July, but then turned negative for August and September, being down by 8,400 and 100 respectively. The August loss of 0.6 percent registered negative on the tables while the other two months showed "no change."

The four unemployment-related series as a group were pretty much mixed throughout the quarter with only August being slightly more negative than positive. The total unemployment rate, seasonally adjusted, rose from 4.0 percent in June to 4.4 percent in July and 4.6 percent in August. The total jobless rate fell in September to 4.3 percent. The 4.6 percent August rate, which was the highest in five years, was probably more the result of a fluke in the misalignment of when summer workers quit jobs and when college classes started up for the fall, than a real deterioration of the economy at that time. The problems with the data corrected themselves by September. Average weekly initial claims fell from 5,525 in June to 5,061 in July, then rose to 5,654 in August and 7,112 in September (a five-year high) as plant layoffs became more numerous. The insured unemployment rate (the ratio of jobless claimants to those eligible for benefits) fell from 1.25 percent in June to 1.17 percent in July in spite of the summer furloughs. It then rose slightly to 1.20 percent in August, but fell to 1.10 percent in September. An overall rising tide was evident as third quarter insured unemployment in recent years has been well below 1.00 percent. Unemployment insurance final payments (which to some extent reflect layoffs six months previous) also had something of a roller coaster ride going from 3,425 in June to 4,546 in July, falling to 3,426 in August (virtually the same as June), then rising to 5,094 by September (a five-year high).

The four production worker hours and earning series as a group were largely positive in July and August, but turned negative by September. The boom in production for export, which turned negative late in the third quarter, appeared to be a factor. The length of the production workweek, which has been above 43.0 hours all year, continued buoyed by exports for July (43.6 hours) and August (43.9 hours). It fell to 42.0 hours by September as the world recession quickly diminished the demand for U.S. exports. The production hours worked rose from 9,329,000 in June to 9,392,000 in July and 9,403,000 in August, but then slid to 9,001,000 in September. The average hourly factory wage rose to new highs of $18.61 in July and $18.75 in August, but slid to $18.58 for September. The average weekly factory wage followed a similar pattern, posting new highs of $809.98 in July and $822,67 in August before falling back to $785.02 by September.

As often happens, the four business-related series as a group turned in a fickled performance, being all positive in July, all negative in August, and largely positive in September. New single family housing permits rose from 1,601 in June to 1,752 in July (height of the building season) then receded to 1,550 in August, and 1,545 in September. New business incorporations rose from 1,281 in June to 1,474 in July, fell to 1,106 in August (a 25-year low), then were up again to 1,273 in September. New light vehicle sales had ups and downs—rising from 35,787 in June to 36,585 in July, dropping to 29,407 in August (a 16-year low), and then rising back to 32,869 in September. Promotions and incentives seem to cause the fluctuations. Taxable retail sales were in a relatively narrow range—rising from $8,810 million in June to $8,870 million in July, dropping back to $8,594 million in August, and then climbing again to $8,687 million in September with back-to-school shopping.

Employment Indicators

	Nonagricultural Wage and Salary Employment* (Thousands)		Manufacturing Employment* (Thousands)		Total Unemployment Rate* (Percent)	
2007	**Unadjusted**	**Adjusted**	**Unadjusted**	**Adjusted**	**Unadjusted**	**Adjusted**
January	3,699.8	3,756.9	279.4	281.1	3.2	2.8
February	3,705.7	3,755.7	280.6	281.9	3.2	2.9
March	3,737.1	3,757.4	280.8	281.4	2.9	2.9
April	3,751.3	3,756.2	280.2	280.6	2.7	2.9
May	3,777.6	3,759.9	279.7	279.8	2.8	3.0
June	3,809.4	3,762.7	281.4	279.9	3.1	3.0
July	3,758.0	3,761.0	279.1	279.7	3.1	3.0
August	3,752.3	3,762.1	278.2	277.3	3.2	3.1
September	3,770.0	3,764.0	277.3	276.6	3.0	3.1
October	3,777.6	3,764.8	275.9	275.8	3.0	3.2
November	3,791.5	3,766.6	275.9	275.6	3.0	3.2
December	3,797.5	3,767.0	275.2	274.6	3.2	3.2
2008						
January	3,718.2	3,775.6	273.2	274.8	3.8	3.4
February	3,724.7	3,774.9	271.2	272.5	3.8	3.5
March	3,753.1	3,773.5	271.7	272.3	3.9	3.7
April	3,771.4	3,776.3	276.1	276.5	3.3	3.5
May	3,790.1	3,772.4	275.7	275.8	3.8	3.9
June	3,821.4	3,774.6	276.0	274.5	4.2	4.0
July	3,776.6	3,779.6	274.5	275.1	4.5	4.4
August	3,772.4	3,782.2	274.3	273.5	4.6	4.6
September	3,792.2	3,786.1	274.1	273.4	4.2	4.3

* These series have been adjusted to First Quarter 2007 benchmarks.

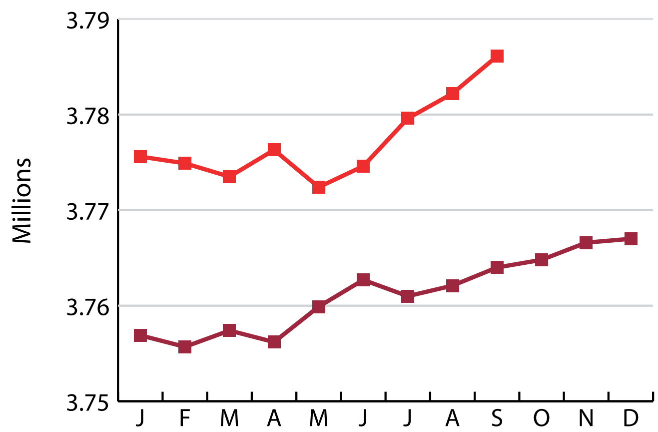
Unemployment Insurance Indicators

	Average Weekly Initial Claims		Insured Unemployment Rate (Percent)		Unemployment Insurance Final Payments	
2007	**Unadjusted**	**Adjusted**	**Unadjusted**	**Adjusted**	**Unadjusted**	**Adjusted**
January	7,301	5,076	1.09	0.86	3,506	3,315
February	5,813	5,808	1.08	0.93	2,911	3,056
March	4,580	5,059	0.95	0.91	3,153	2,794
April	4,265	5,189	0.92	0.96	3,054	2,918
May	3,961	4,771	0.91	0.93	3,573	3,274
June	4,093	4,528	0.83	0.90	2,933	2,759
July	4,995	4,436	0.79	0.82	3,470	3,427
August	3,829	4,567	0.63	0.69	3,149	2,863
September	3,617	4,359	0.82	0.97	2,630	3,116
October	4,519	4,938	0.84	0.90	2,956	3,273
November	5,603	5,307	0.90	0.93	2,496	2,763
December	5,991	4,531	1.07	1.01	2,741	3,076
2008						
January	8,194	5,697	1.16	0.92	3,747	3,543
February	5,407	5,403	1.11	0.95	3,040	3,192
March	5,001	5,523	1.23	1.18	3,295	2,920
April	4,777	5,812	1.06	1.11	4,311	4,119
May	4,772	5,747	1.02	1.04	3,562	3,264
June	4,994	5,525	1.16	1.25	3,641	3,425
July	5,698	5,061	1.13	1.17	4,603	4,546
August	4,741	5,654	1.09	1.20	3,768	3,426
September	5,900	7,112	0.93	1.10	4,300	5,094

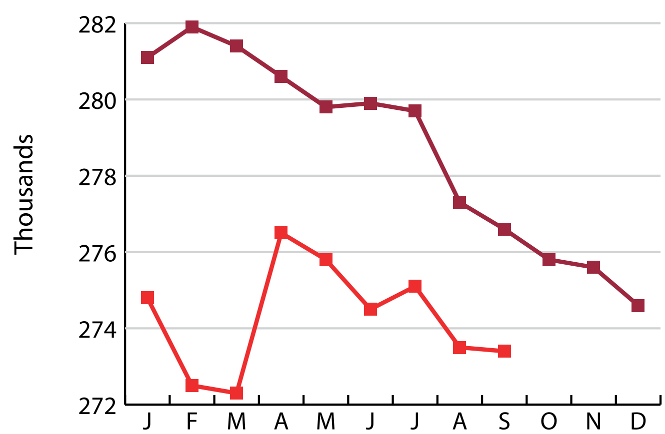
Employment Indicators

January 2007 - September 2008 | 2007 | 2008

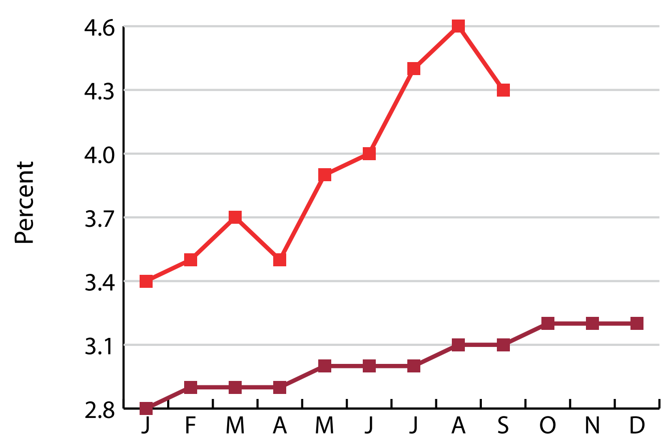
Nonagricultural Wage and Salary Employment



Manufacturing Employment



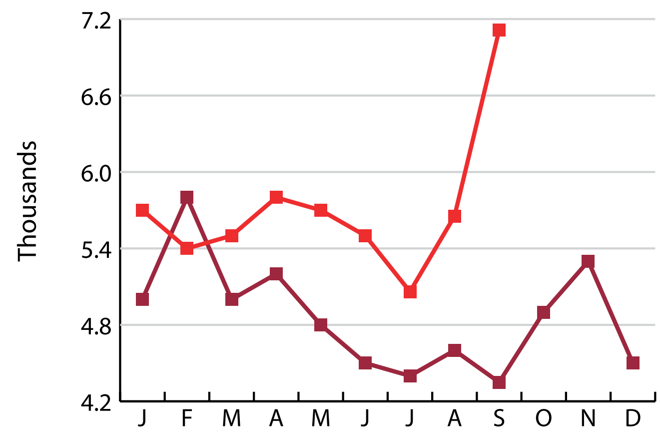
Total Unemployment Rate



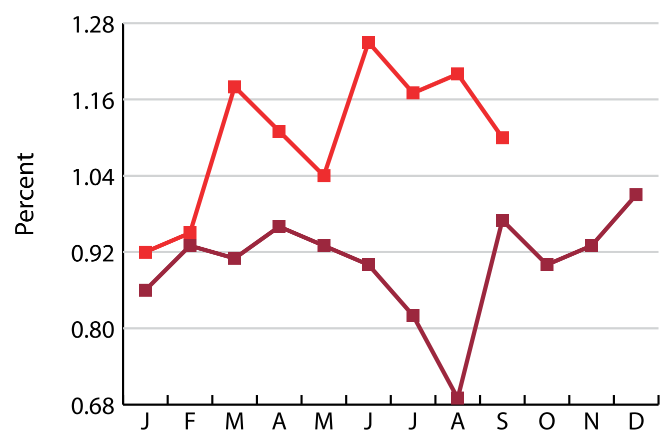
Unemployment Insurance Indicators

January 2007 - September 2008 | 2007 | 2008

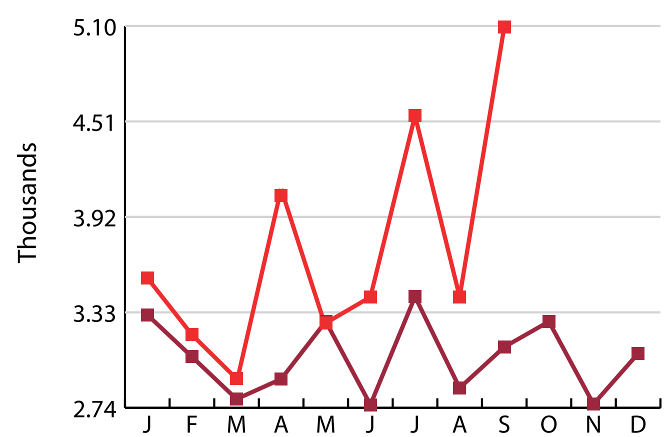
Average Weekly Initial Claims



Insured Unemployment Rate



Unemployment Insurance Final Payments



Manufacturing Production Worker Indicators

2007	Average Weekly Hours* Unadjusted	Average Weekly Hours* Adjusted	Average Hourly Earnings* (Dollars) Unadjusted	Average Hourly Earnings* (Dollars) Adjusted	Deflated Average Hourly Earnings* (1982-84 Dollars) Unadjusted	Deflated Average Hourly Earnings* (1982-84 Dollars) Adjusted
January	41.3	41.1	17.09	17.08	8.65	8.58
February	41.1	41.2	17.06	17.04	8.59	8.52
March	41.5	41.8	17.08	17.18	8.51	8.56
April	41.1	41.6	17.35	17.28	8.58	8.58
May	41.5	41.4	17.26	17.34	8.47	8.55
June	42.6	42.2	17.70	17.62	8.68	8.67
July	41.8	42.3	17.71	17.73	8.69	8.73
August	42.2	42.7	17.67	17.76	8.70	8.75
September	41.8	41.9	17.79	17.82	8.73	8.77
October	41.8	41.4	17.67	17.68	8.65	8.72
November	43.6	43.7	18.35	18.40	8.91	8.88
December	43.7	42.8	18.51	18.35	9.00	8.86
2008						
January	43.5	43.3	18.31	18.30	8.86	8.78
February	43.8	43.9	18.25	18.22	8.81	8.73
March	43.6	43.9	18.22	18.33	8.71	8.76
April	42.9	43.5	18.33	18.25	8.70	8.69
May	44.4	44.3	18.19	18.27	8.55	8.63
June	43.9	43.4	18.46	18.38	8.58	8.57
July	43.1	43.6	18.59	18.61	8.59	8.63
August	43.4	43.9	18.66	18.75	8.67	8.73
September	41.9	42.0	18.55	18.58	8.63	8.68

* These series have been adjusted to First Quarter 2007 benchmarks.

Manufacturing Production Worker Indicators (continued)

2007	Total Production Hours* (Thousands) Unadjusted	Total Production Hours* (Thousands) Adjusted	Average Weekly Earnings* (Dollars) Unadjusted	Average Weekly Earnings* (Dollars) Adjusted	Deflated Average Weekly Earnings* (1982-84 Dollars) Unadjusted	Deflated Average Weekly Earnings* (1982-84 Dollars) Adjusted
January	9,032	9,037	705.82	701.40	357.27	352.96
February	9,026	9,087	701.17	703.21	353.16	352.42
March	9,113	9,204	708.82	715.47	353.33	356.29
April	9,021	9,122	713.09	718.04	352.79	355.78
May	9,093	9,081	716.29	717.15	351.71	351.95
June	9,398	9,259	754.02	742.36	369.79	366.13
July	9,137	9,270	740.28	748.36	363.42	369.10
August	9,208	9,275	745.67	757.49	366.97	374.30
September	9,096	9,101	743.62	751.06	364.72	369.22
October	9,029	8,943	738.61	732.53	361.46	359.85
November	9,426	9,437	800.06	803.52	388.58	389.25
December	9,413	9,193	808.89	786.17	393.09	379.54
2008						
January	9,270	9,276	796.49	791.50	385.25	380.61
February	9,237	9,299	799.35	801.67	385.69	384.88
March	9,217	9,309	794.39	801.85	379.82	383.00
April	9,224	9,328	786.36	791.82	373.22	376.38
May	9,550	9,538	807.64	808.61	379.55	379.82
June	9,469	9,329	810.39	797.86	376.54	372.81
July	9,258	9,392	801.23	809.98	370.42	376.21
August	9,335	9,403	809.84	822.67	376.24	383.76
September	8,996	9,001	777.25	785.02	361.62	366.09

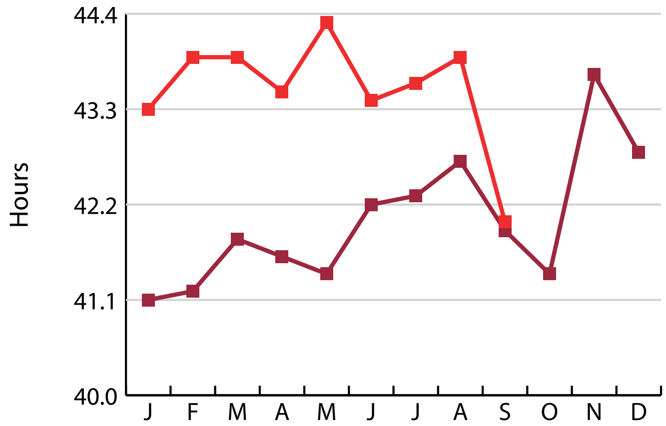
* These series have been adjusted to First Quarter 2007 benchmarks.

Manufacturing Production Worker Indicators

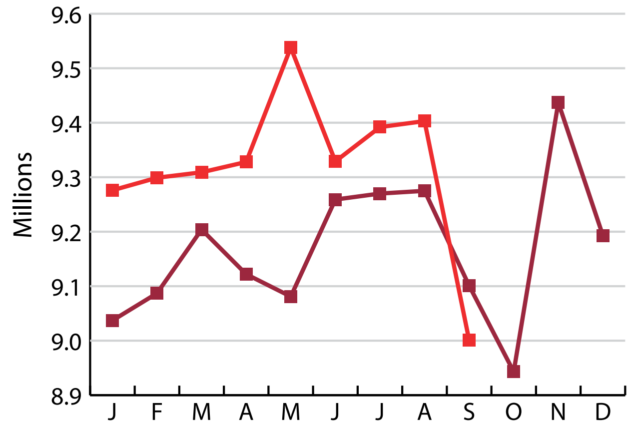
January 2007 - September 2008

2007 2008

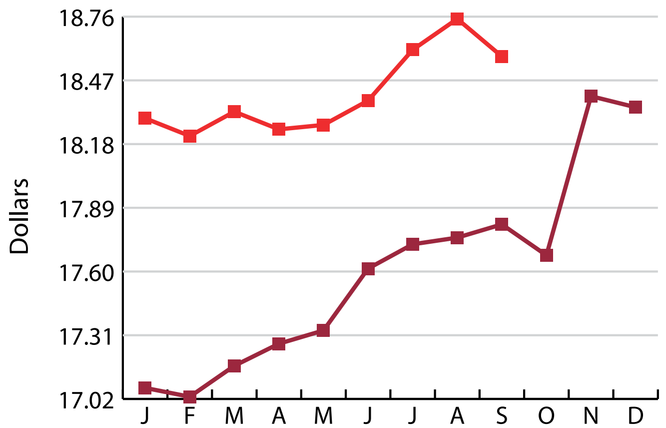
Average Weekly Hours



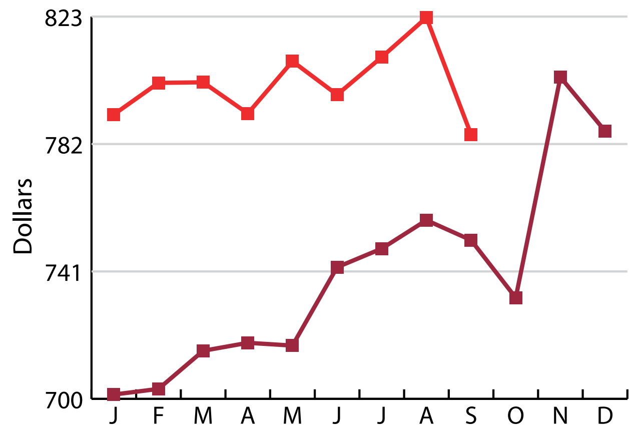
Total Production Hours



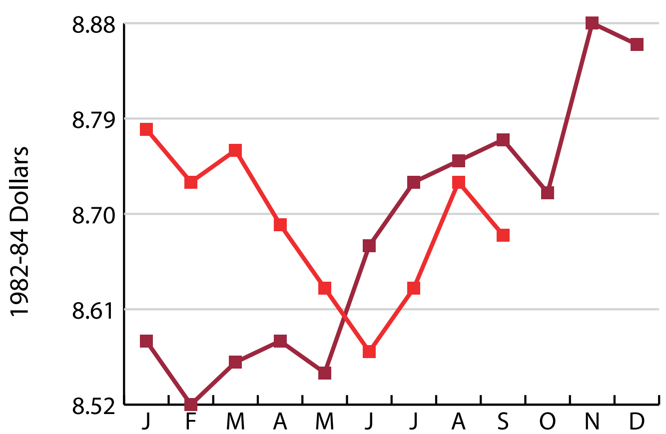
Average Hourly Earnings



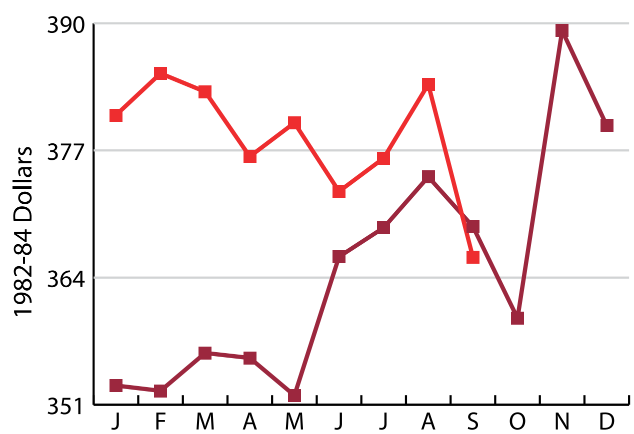
Average Weekly Earnings



Deflated Average Hourly Earnings



Deflated Average Weekly Earnings



Business Indicators

	Single Family Housing Permits		New Business Incorporations		New Vehicle Registrations	
2007	**Unadjusted**	**Adjusted**	**Unadjusted**	**Adjusted**	**Unadjusted**	**Adjusted**
January	2,350	2,765	1,560	1,829	41,967	46,072
February	2,588	2,891	1,553	1,429	33,096	42,513
March	3,082	2,683	1,885	1,466	45,232	42,332
April	2,936	2,605	1,549	1,424	46,993	44,171
May	3,156	2,671	1,596	1,476	55,429	48,922
June	3,057	2,568	1,575	1,501	49,747	43,067
July	2,751	2,647	1,315	1,384	44,414	41,951
August	2,491	2,362	1,534	1,561	47,082	40,718
September	1,849	2,008	1,114	1,147	40,381	38,447
October	2,084	2,181	1,558	1,748	43,040	42,233
November	1,702	2,000	1,185	1,435	35,045	41,646
December	1,443	1,855	1,271	1,368	28,170	37,168
2008						
January	1,891	2,225	1,578	1,850	38,869	42,671
February	1,865	2,083	1,329	1,223	31,615	40,610
March	2,045	1,780	1,604	1,248	37,113	34,734
April	1,947	1,728	1,761	1,619	39,156	36,804
May	1,818	1,539	1,453	1,344	40,756	35,972
June	1,905	1,601	1,344	1,281	41,337	35,787
July	1,821	1,752	1,400	1,474	38,733	36,585
August	1,635	1,550	1,087	1,106	34,003	29,407
September	1,422	1,545	1,236	1,273	34,522	32,869

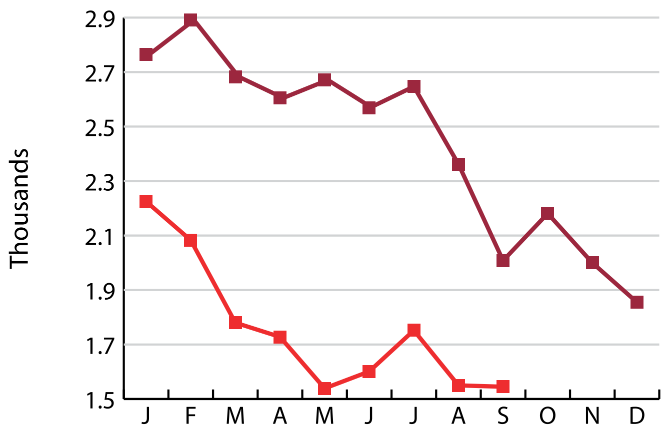
Business Indicators (continued)

	Taxable Retail Sales (Millions of Dollars)		Deflated Taxable Retail Sales (Millions of 1982-84 Dollars)	
2007	**Unadjusted**	**Adjusted**	**Unadjusted**	**Adjusted**
January	7,714	8,942	3,905	4,496
February	7,807	8,898	3,932	4,459
March	8,895	8,766	4,434	4,368
April	8,586	8,683	4,248	4,316
May	9,045	8,967	4,441	4,430
June	9,299	8,732	4,560	4,304
July	8,633	8,789	4,238	4,308
August	8,849	8,932	4,355	4,419
September	8,557	8,622	4,197	4,245
October	9,028	9,004	4,418	4,398
November	8,687	8,842	4,219	4,284
December	10,572	8,623	5,138	4,162
2008				
January	7,599	8,808	3,676	4,233
February	7,692	8,767	3,711	4,208
March	8,728	8,602	4,173	4,111
April	8,538	8,635	4,052	4,117
May	8,786	8,710	4,129	4,119
June	9,382	8,810	4,359	4,114
July	8,712	8,870	4,028	4,094
August	8,514	8,594	3,955	4,014
September	8,622	8,687	4,011	4,058

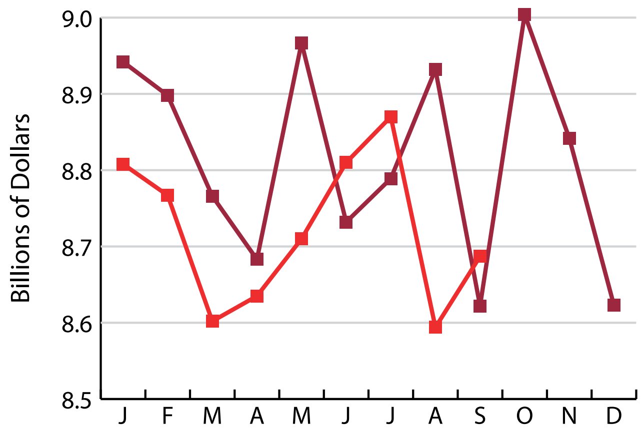
January 2007 - September 2008

2007 2008

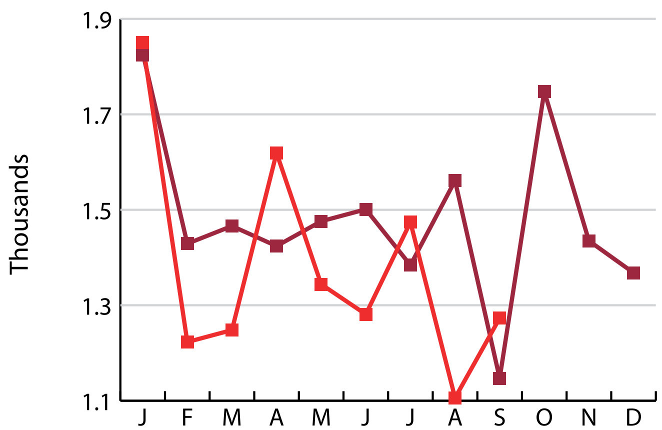
Single Family Housing Permits



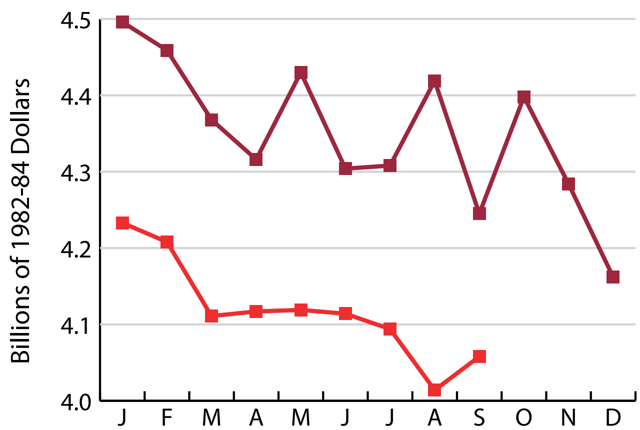
Taxable Retail Sales



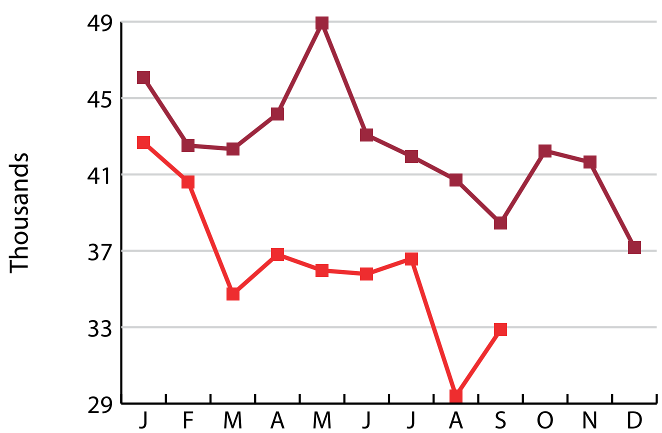
New Business Incorporations



Deflated Taxable Retail Sales



New Vehicle Registrations



Data Summary (Seasonally Adjusted Data) July 2008

	Jul 2008	Jun 2008	Jul 2007	Percent & Direction of Change** Jun 2008-Jul 2008		Jul 2007-Jul 2008	
EMPLOYMENT							
*Nonag Wage & Salary Emp (000)	3,779.6	3,774.6	3,761.0	0.1	(0)	0.49	(0)
*Manufacturing Employment (000)	275.1	274.5	279.7	0.2	(0)	-1.6	(-)
*Total Unemployment Rate (%)	4.4	4.0	3.0		(-)		(-)
UNEMPLOYMENT INSURANCE							
Average Weekly Initial Claims	5,061	5,525	4,436	-8.4	(+)	14.1	(-)
Insured Unemployment Rate (%)	1.17	1.25	0.82		(+)		(-)
Final Payments	4,546	3,425	3,427	32.7	(-)	32.7	(-)
MANUFACTURING PRODUCTION WORKERS							
*Average Weekly Hours	43.6	43.4	42.3	0.46	(0)	3.1	(+)
*Total Production Hours (000)	9,392	9,329	9,270	0.7	(+)	1.3	(+)
*Average Hourly Earnings ($)	18.61	18.38	17.73	1.3	(+)	5.0	(+)
*Average Weekly Earnings ($)	809.98	797.86	748.36	1.5	(+)	8.2	(+)
BUSINESS							
Single Family Housing Permits	1,752	1,601	2,647	9.4	(+)	-33.8	(-)
New Business Incorporations	1,474	1,281	1,384	15.1	(+)	6.5	(+)
New Vehicle Registrations	36,585	35,787	41,951	2.2	(+)	-12.8	(-)
Taxable Retail Sales ($M)	8,870	8,810	8,789	0.7	(+)	0.9	(+)

Data Summary (Seasonally Adjusted Data) August 2008

	Aug 2008	Jul 2008	Aug 2007	Percent & Direction of Change** Jul 2008-Aug 2008		Aug 2007-Aug 2008	
EMPLOYMENT							
*Nonag Wage & Salary Emp (000)	3,782.2	3,779.6	3,762.1	0.1	(0)	0.53	(+)
*Manufacturing Employment (000)	273.5	275.1	277.3	-0.6	(-)	-1.4	(-)
*Total Unemployment Rate (%)	4.6	4.4	3.1		(-)		(-)
UNEMPLOYMENT INSURANCE							
Average Weekly Initial Claims	5,654	5,061	4,567	11.7	(-)	23.8	(-)
Insured Unemployment Rate (%)	1.20	1.17	0.69		(-)		(-)
Final Payments	3,426	4,546	2,863	-24.6	(+)	19.7	(-)
MANUFACTURING PRODUCTION WORKERS							
*Average Weekly Hours	43.9	43.6	42.7	0.7	(+)	2.8	(+)
*Total Production Hours (000)	9,403	9,392	9,275	0.1	(0)	1.4	(+)
*Average Hourly Earnings ($)	18.75	18.61	17.76	0.8	(+)	5.6	(+)
*Average Weekly Earnings ($)	822.67	809.98	757.49	1.6	(+)	8.6	(+)
BUSINESS							
Single Family Housing Permits	1,550	1,752	2,362	-11.5	(-)	-34.4	(-)
New Business Incorporations	1,106	1,474	1,561	-25.0	(-)	-29.1	(-)
New Vehicle Registrations	29,407	36,585	40,718	-19.6	(-)	-27.8	(-)
Taxable Retail Sales ($M)	8,594	8,870	8,932	-3.1	(-)	-3.8	(-)

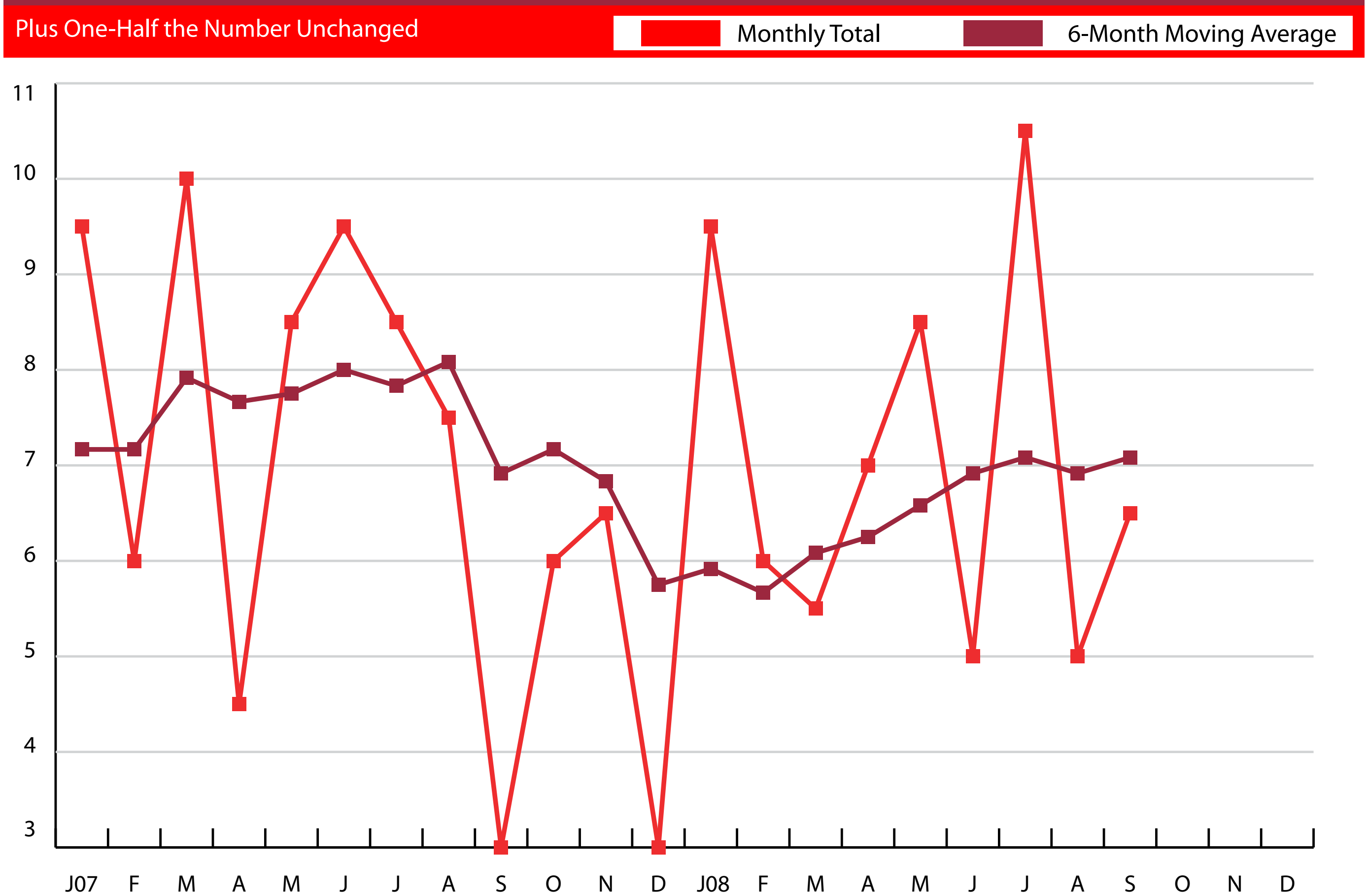
DATA SUMMARY (SEASONALLY ADJUSTED DATA) SEPTEMBER 2008

	Sep 2008	Aug 2008	Sep 2007	Percent & Direction of Change** Aug 2008-Sep 2008		Sep 2007-Sep 2008	
EMPLOYMENT							
*Nonag Wage & Salary Emp (000)	3,786.1	3,782.2	3,764.0	0.1	(0)	0.6	(+)
*Manufacturing Employment (000)	273.4	273.5	276.6	0.0	(0)	-1.2	(-)
*Total Unemployment Rate (%)	4.3	4.6	3.1		(+)		(-)
UNEMPLOYMENT INSURANCE							
Average Weekly Initial Claims	7,112	5,654	4,359	25.8	(-)	63.2	(-)
Insured Unemployment Rate (%)	1.10	1.20	0.97		(+)		(-)
Final Payments	5,094	3,426	3,116	48.7	(-)	63.5	(-)
MANUFACTURING PRODUCTION WORKERS							
*Average Weekly Hours	42.0	43.9	41.9	-4.3	(-)	0.2	(0)
*Total Production Hours (000)	9,001	9,403	9,101	-4.3	(-)	-1.1	(-)
*Average Hourly Earnings ($)	18.58	18.75	17.82	-0.9	(-)	4.3	(+)
*Average Weekly Earnings ($)	785.02	822.67	751.06	-4.6	(-)	4.5	(+)
BUSINESS							
Single Family Housing Permits	1,545	1,550	2,008	-0.3	(0)	-23.1	(-)
New Business Incorporations	1,273	1,106	1,147	15.1	(+)	11.0	(+)
New Vehicle Registrations	32,869	29,407	38,447	11.8	(+)	-14.5	(-)
Taxable Retail Sales ($M)	8,687	8,594	8,622	1.1	(+)	0.8	(+)

* Revised to 1st Quarter 2007 benchmarks.
** (+) Favorable, (-) Not Favorable, (0) Change between +/- 0.5%.

NUMBER OF SERIES MOVING FAVORABLY

Plus One-Half the Number Unchanged



The Professional and Technical Services Sector* in Virginia

by James P. Wilson, Senior Economist

Establishments

- The average employment per Professional Services establishment is about one-third smaller than the average for All Industries.
- None of the industries has a large number of employees per establishment (over 100) and the largest is only 33.
- There are an equal number of industries (eight) with less than ten employees per establishment as there are industries with more than ten to 15 per establishment. The remaining industries have about 20-33 employees per establishment.
- The two industries with double-digit percentage shares of establishments and employment are Computer Systems Design and Management Consulting Services. By employment they are the first- and third-largest industries, respectively.
- The Offices of Lawyers industry has over ten percent of establishments, but because they are about one-third smaller than the Professional Services average, they have less than seven percent of employment. To the contrary, Engineering Services has about seven percent of establishments, but because they are twice as large as the sector average, they have over 14 percent of employment.

*__Note__: private only. Hereafter, referred to as Professional Services. Unless otherwise noted, the source for all data is Virginia Employment Commission, Quarterly Census of Employment and Wages (QCEW, formerly ES-202). The tables show only those industries with at least 1,500 employees in 2007. These industries represent 93.7 percent of establishments and 97.6 percent of employment.

	NAICS Code and Industry	2007 Average Establishments	Percent of Total	2007 Average Employment	Percent of Total	Employment per Establishment
54111	Offices of Lawyers	3,656	11.6%	23,993	6.7%	7
54119	Other Legal Services	670	2.1%	2,594	0.7%	4
54121	Accounting and Bookkeeping Services	2,988	9.5%	30,100	8.4%	10
54131	Architectural Services	597	1.9%	5,736	1.6%	10
54133	Engineering Services	2,299	7.3%	50,531	14.1%	22
54137	Other Surveying and Mapping Services	301	1.0%	2,412	0.7%	8
54138	Testing Laboratories	188	0.6%	2,155	0.6%	11
54151	Computer Systems Design and Rel Services	9,439	30.0%	126,236	35.3%	13
54161	Management Consulting Services	4,870	15.5%	49,120	13.7%	10
54162	Environmental Consulting Services	297	0.9%	3,510	1.0%	12
54169	Other Technical Consulting Services	890	2.8%	4,936	1.4%	6
54171	Physical/Engineering/Biological Research	665	2.1%	21,642	6.0%	33
54172	Social Science/Humanities Research	145	0.5%	2,833	0.8%	20
54181	Advertising Agencies	369	1.2%	2,404	0.7%	7
54182	Public Relations Agencies	395	1.3%	1,632	0.5%	4
54186	Direct Mail Advertising	138	0.4%	3,278	0.9%	24
54189	Other Services Related to Advertising	294	0.9%	2,338	0.7%	8
54191	Marketing Research and Public Opinion Poll	198	0.6%	2,022	0.6%	10
54192	Photographic Services	351	1.1%	1,830	0.5%	5
54194	Veterinary Services	753	2.4%	10,188	2.8%	14
54	**Professional and Technical Services Total**	**31,498**		**357,922**		**11**
	All Industries	**221,599**		**3,671,407**		**17**

Employment

- Computer Systems Design is the largest industry and has added about four times as many jobs as the second-largest industry, Engineering Services, in each of the five-, ten-, and fifteen-year periods (see tables on page 27).
- Seven of the industries had triple-digit growth over the last 15 years, and each had strong positive growth in the last five and ten years.
- Other Technical Consulting Services was the fastest-growing industry in each of the five-, ten-, and fifteen-year periods. It was also the only industry with triple-digit growth in each of the periods.
- No industry lost employment in the last 15 years.
- Those industries that had losses in the five- and ten-year periods did not have losses in both periods (see tables on page 27).
- In the last 15 years, Professional Services grew over three times faster than All Industries, increasing Professional Services' share of employment from 6.1 percent to 9.7 percent.
- Other Legal Services, which includes Title Abstract and Settlement Offices, has shown strong growth, but might suffer large employment losses as the housing market works off its current excess inventory.
- Compared to the nation, Virginia's Professional Services sector grew 55 percent faster (104.5 percent vs. 67.5 percent) in the last 15 years, 64 percent faster in the last ten years (59.1 percent vs. 36.1 percent), and 65 percent faster in the last five years (25.0 percent vs. 15.2 percent).*

*Source: Current Employment Statistics of U.S. Department of Labor, Bureau of Labor Statistics.

NAICS Code and Industry		1992	1997	2002	2007
54111	Offices of Lawyers	19,385	20,471	23,289	23,993
54119	Other Legal Services	789	963	1,735	2,594
54121	Accounting and Bookkeeping Services	16,725	20,960	28,605	30,100
54131	Architectural Services	2,944	3,711	4,420	5,736
54133	Engineering Services	29,605	36,180	42,542	50,531
54137	Other Surveying and Mapping Services	1,622	1,875	2,036	2,412
54138	Testing Laboratories	1,631	1,800	1,815	2,155
54151	Computer Systems Design and Rel Services	44,384	69,944	98,120	126,236
54161	Management Consulting Services	18,042	26,431	35,150	49,120
54162	Environmental Consulting Services	1,306	1,728	2,490	3,510
54169	Other Technical Consulting Services	626	978	1,554	4,936
54171	Physical/Engineering/Biological Research	11,794	9,880	12,577	21,642
54172	Social Science/Humanities Research	2,695	2,514	2,771	2,833
54181	Advertising Agencies	1,992	2,509	2,273	2,404
54182	Public Relations Agencies	1,142	1,353	1,736	1,632
54186	Direct Mail Advertising	2,335	3,220	3,140	3,278
54189	Other Services Related to Advertising	1,015	1,674	1,771	2,338
54191	Marketing Research and Public Opinion Poll	1,540	2,232	1,810	2,022
54192	Photographic Services	1,782	1,794	1,907	1,830
54194	Veterinary Services	4,572	6,223	8,353	10,188
54	**Professional and Technical Services Total**	**171,202**	**223,087**	**284,751**	**357,922**
	All Industries	**2,789,766**	**3,166,682**	**3,404,890**	**3,671,407**

NAICS Code and Industry		1992-2007 Change		1997-2007 Change		2002-2007 Change	
		Number	Percent	Number	Percent	Number	Percent
54111	Offices of Lawyers	4,608	23.8%	3,522	17.2%	704	3.0%
54119	Other Legal Services	1,805	228.8%	1,631	169.4%	859	49.5%
54121	Accounting and Bookkeeping Services	13,375	80.0%	9,140	43.6%	1,495	5.2%
54131	Architectural Services	2,792	94.8%	2,025	54.6%	1,316	29.8%
54133	Engineering Services	20,926	70.7%	14,351	39.7%	7,989	18.8%
54137	Other Surveying and Mapping Services	790	48.7%	537	28.6%	376	18.5%
54138	Testing Laboratories	524	32.1%	355	19.7%	340	18.7%
54151	Computer Systems Design and Rel Services	81,852	184.4%	56,292	80.5%	28,116	28.7%
54161	Management Consulting Services	31,078	172.3%	22,689	85.8%	13,970	39.7%
54162	Environmental Consulting Services	2,204	168.8%	1,782	103.1%	1,020	41.0%
54169	Other Technical Consulting Services	4,310	688.5%	3,958	404.7%	3,382	217.6%
54171	Physical/Engineering/Biological Research	9,848	83.5%	11,762	119.0%	9,065	72.1%
54172	Social Science/Humanities Research	138	5.1%	319	12.7%	62	2.2%
54181	Advertising Agencies	412	20.7%	-105	-4.2%	131	5.8%
54182	Public Relations Agencies	490	42.9%	279	20.6%	-104	-6.0%
54186	Direct Mail Advertising	943	40.4%	58	1.8%	138	4.4%
54189	Other Services Related to Advertising	1,323	130.3%	664	39.7%	567	32.0%
54191	Marketing Research and Public Opinion Poll	482	31.3%	-210	-9.4%	212	11.7%
54192	Photographic Services	48	2.7%	36	2.0%	-77	-4.0%
54194	Veterinary Services	5,616	122.8%	3,965	63.7%	1,835	22.0%
54	**Professional and Technical Services Total**	**186,720**	**109.1%**	**134,835**	**60.4%**	**73,171**	**25.7%**
	All Industries	**881,641**	**31.6%**	**504,725**	**15.9%**	**266,517**	**7.8%**

Wages

- Management Consulting Services is the highest-paying industry at around two times the All Industries average and ranks third in number of employees.
- The industry with the largest employment, Computer Systems Design Services, has the second-highest wage, which is 36 percent higher than the Professional Services sector average.
- The lowest-paying industry, Photographic Services, pays about 73 percent less than the Professional Services average. It is the next-to-smallest employing industry.
- Twelve of the 20 industries, with about 90 percent of Professional Services employees, pay average weekly wages of at least $1,000.
- All but six of the 20 industries, with over 25 percent of Professional Services employees, pay less than the Professional Services average.
- With its wage growth about 24 percent faster than the All Industries average, Professional Services has increased its wage premium from 56.6 percent in 1992 to 80.3 percent in 2007. (See table at top of page 29.)
- Other Technical Consulting Services was the only industry whose average wages grew faster than the Professional Services average in each of the five-, ten-, and fifteen-year periods. This allowed its average wage to move from seventh to fourth (See table at bottom of page 29.)
- All but five of the 20 industries have faster wage growth in the last five years than the All Industries average of 4.3 percent.
- Total wages exceed $29.7 billion per year. Although Professional Services has 9.7 percent of employment, its very high average pay produces over 17 percent of total wages.

NAICS Code and Industry		2007 Average Employment	2007 Average Weekly Wage	2007 Average Annual Wage	Rank
54161	Management Consulting Services	49,120	$1,820	$94,640	1
54151	Computer Systems Design and Rel Services	126,236	$1,813	$94,276	2
54171	Physical/Engineering/Biological Research	21,642	$1,804	$93,808	3
54169	Other Technical Consulting Services	4,936	$1,738	$90,376	4
54182	Public Relations Agencies	1,632	$1,693	$88,036	5
54133	Engineering Services	50,531	$1,635	$85,020	6
54172	Social Science/Humanities Research	2,833	$1,540	$80,080	7
54162	Environmental Consulting Services	3,510	$1,468	$76,336	8
54111	Offices of Lawyers	23,993	$1,460	$75,920	9
54181	Advertising Agencies	2,404	$1,394	$72,488	10
54131	Architectural Services	5,736	$1,373	$71,396	11
54121	Accounting and Bookkeeping Services	30,100	$1,206	$62,712	12
54191	Marketing Research and Public Opinion Poll	2,022	$987	$51,324	13
54138	Testing Laboratories	2,155	$977	$50,804	14
54119	Other Legal Services	2,594	$880	$45,760	15
54137	Other Surveying and Mapping Services	2,412	$849	$44,148	16
54186	Direct Mail Advertising	3,278	$804	$41,808	17
54194	Veterinary Services	10,188	$589	$30,628	18
54189	Other Services Related to Advertising	2,338	$531	$27,612	19
54192	Photographic Services	1,830	$431	$22,412	20
54	**Professional and Technical Services Total**	**357,922**	**$1,596**	**$82,992**	
	All Industries	**3,671,407**	**$885**	**$46,020**	

	NAICS Code and Sectors	1992	2007	1992-2007 Average Annual Growth Rate	Rank
55	Management of Companies and Enterprises	$790	$1,878	5.9%	1
52	Finance and Insurance	$614	$1,366	5.5%	2
54	**Professional and Technical Services**	**$750**	**$1,596**	**5.2%**	**3**
22	Utilities	$811	$1,658	4.9%	4
51	Information	$706	$1,438	4.9%	5
53	Real Estate and Rental and Leasing	$414	$817	4.6%	6
56	Administrative and Waste Services	$302	$594	4.6%	7
42	Wholesale Trade	$645	$1,223	4.4%	8
81	Other Services, Ex. Public Admin.	$353	$660	4.3%	9
23	Construction	$456	$843	4.2%	10
61	Educational Services	$424	$742	3.8%	11
31-33	Manufacturing	$528	$919	3.8%	12
92	Total Government	$537	$925	3.7%	13
11	Agriculture, Forestry, Fishing and Hunting	$302	$507	3.5%	14
71	Arts, Entertainment, and Recreation	$268	$443	3.4%	15
72	Accommodation and Food Services	$183	$301	3.4%	16
62	Health Care and Social Assistance	$477	$783	3.4%	17
44-45	Retail Trade	$307	$474	2.9%	18
21	Mining	$685	$1,041	2.8%	19
48-49	Transportation and Warehousing	$511	$776	2.8%	20
	All Industries	**$479**	**$885**	**4.2%**	

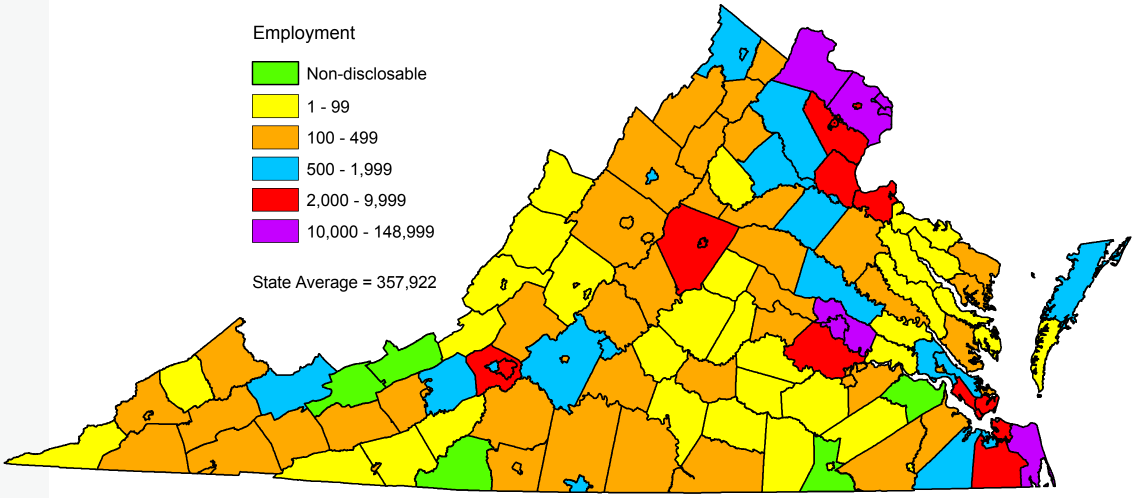
NAICS Code and Industry		Average Weekly Wage				Average Annual Growth Rate			Rank*
		1992	1997	2002	2007	1992-2007	1997-2007	2002-2007	
54182	Public Relations Agencies	$833	$897	$1,181	$1,693	4.8%	6.6%	7.5%	1
54169	Other Technical Consulting Services	$769	$919	$1,263	$1,738	5.6%	6.6%	6.6%	2
54133	Engineering Services	$798	$983	$1,228	$1,635	4.9%	5.2%	5.9%	3
54121	Accounting and Bookkeeping Services	$575	$711	$910	$1,206	5.1%	5.4%	5.8%	4
54171	Physical/Engineering/Biological Research	$884	$1,102	$1,378	$1,804	4.9%	5.1%	5.5%	5
54137	Other Surveying and Mapping Services	$434	$516	$654	$849	4.6%	5.1%	5.4%	6
54131	Architectural Services	$692	$835	$1,070	$1,373	4.7%	5.1%	5.1%	7
54161	Management Consulting Services	$935	$1,093	$1,425	$1,820	4.5%	5.2%	5.0%	8
54172	Social Science/Humanities Research	$584	$790	$1,208	$1,540	6.7%	6.9%	5.0%	9
54111	Offices of Lawyers	$717	$859	$1,149	$1,460	4.9%	5.4%	4.9%	10
54194	Veterinary Services	$335	$378	$465	$589	3.8%	4.5%	4.8%	11
54191	Marketing Research and Public Opinion Poll	$383	$410	$781	$987	6.5%	9.2%	4.8%	12
54162	Environmental Consulting Services	$831	$942	$1,165	$1,468	3.9%	4.5%	4.7%	13
54151	Computer Systems Design and Rel Services	$859	$1,093	$1,440	$1,813	5.1%	5.2%	4.7%	14
54138	Testing Laboratories	$533	$605	$787	$977	4.1%	4.9%	4.4%	15
54181	Advertising Agencies	$722	$941	$1,131	$1,394	4.5%	4.0%	4.3%	16
54186	Direct Mail Advertising	$408	$515	$658	$804	4.6%	4.6%	4.1%	17
54192	Photographic Services	$239	$277	$358	$431	4.0%	4.5%	3.8%	18
54189	Other Services Related to Advertising	$362	$371	$455	$531	2.6%	3.7%	3.1%	19
54119	Other Legal Services	$540	$582	$867	$880	3.3%	4.2%	0.3%	20
54	**Professional and Technical Services Total**	**$750**	**$931**	**$1,228**	**$1,596**	**5.2%**	**5.5%**	**5.4%**	
	All Industries	**$479**	**$568**	**$716**	**$885**	**4.2%**	**4.5%**	**4.3%**	

*Rank based on 2002-2007 average annual growth rate.

Geographic Distribution of Employment and Wages

- Professional Services employment in the top two areas (Fairfax and Arlington counties) exceeds 181,000, and is over 50 percent of the state total.
- About 69 percent of the employment is in the seven localities with at least 10,000 employees. Fairfax County alone accounts for over 41 percent of total employment.

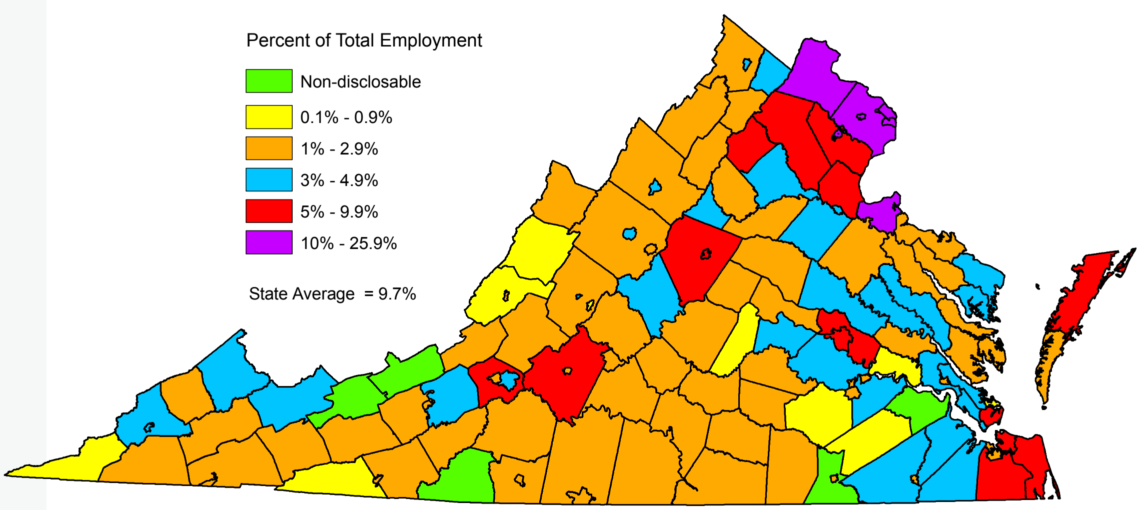
2007 Average Employment in the Professional and Technical Services Sector



Source: Virginia Employment Commission, November 2008

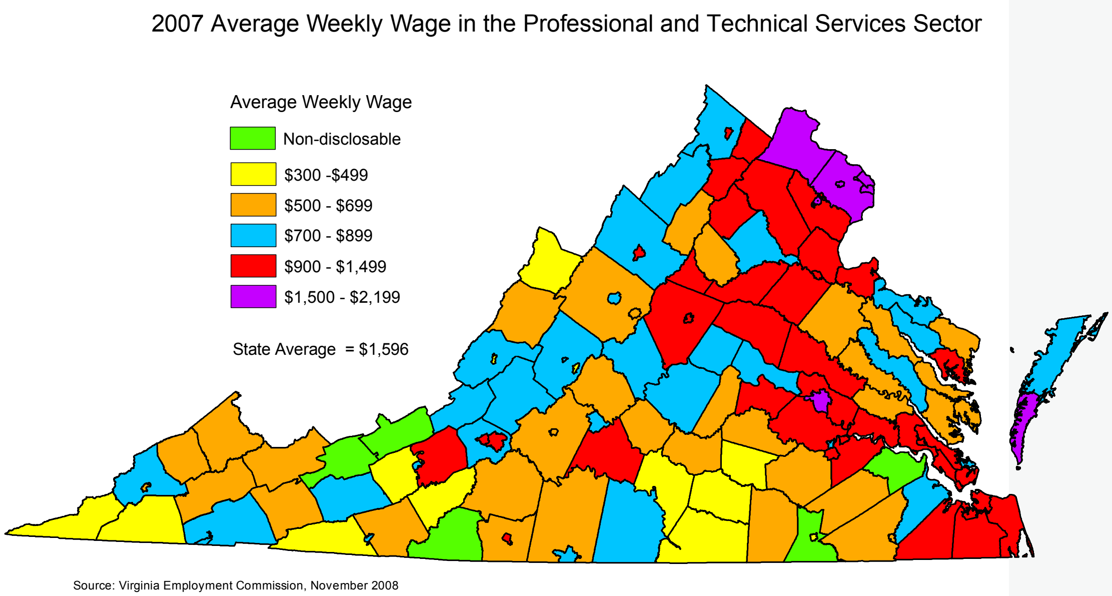
- King George County, which lies next to the Northern Virginia and Richmond Metropolitan Statistical Areas (MSAs), is the only non-metropolitan area with at least 1,000 Professional Services employees. Besides its proximity to the MSAs, some of King George's employment in this sector is tied to the Dahlgren Naval Surface Weapons Center.
- Although data for five of the localities is non-disclosable, these localities have only 3.4 percent of Professional Services employment.
- Professional Services employment is so heavily concentrated in the metropolitan areas that the top 20 localities are all in MSAs and account for over 85 percent of statewide sector employment.
- One-fourth of the localities have less than 100 Professional Services employees.
- Except for King George County, the eight localities with the highest proportion of Professional Services employment relative to total employment are in the Northern Virginia MSA.
- Over half of the areas have less than three percent of their employment in the Professional Services sector. (This does not include the areas with non-disclosable employment.)

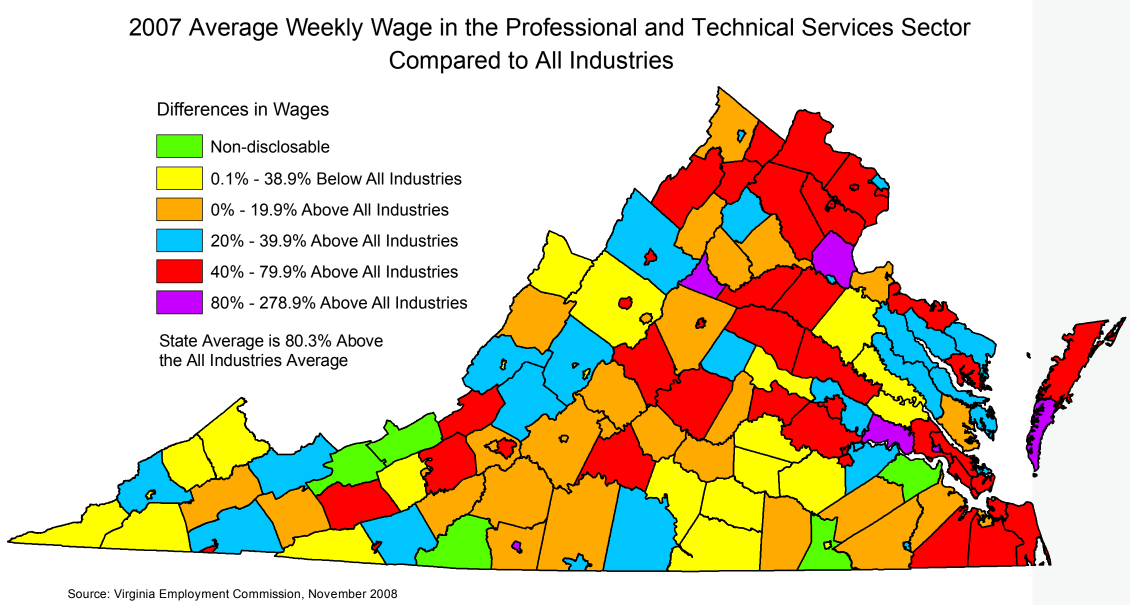
2007 Percent of Total Employment in the Professional and Technical Services Sector



Source: Virginia Employment Commission, November 2008

- Seven localities have average weekly wages in Professional Services that exceed the state Professional Services average. All but Northampton County are in the Northern Virginia MSA.
- Fifty areas have Professional Services wages that exceed the statewide All Industries average wage of $885. Most of these are in metropolitan areas.
- In about ten percent of the localities the average weekly wage for Professional Services is less than $500 or more than two-thirds below the statewide Professional Services sector wage. These areas are mostly rural counties and small cities.
- The Professional Services wage is more than the area's All Industries wage in about 80 percent of localities. In about one-fourth of localities Professional Services wages are at least 50 percent higher than the All Industries average.
- The Professional Services wage in 12 localities is at least 10 percent below the All Industries wage in their respective area.
- Northampton and Lunenburg counties have, respectively, the highest and lowest Professional Services wage relative to the All Industries wage in their locality.





Trends in Defense Employment 1997 - 2007

by James P. Wilson, Senior Economist

Virginia continues as one of the leading states in total Department of Defense (DoD) employment[1]. In federal Fiscal Year (FY) 2007, Virginia employed 11.4 percent of all military and civilian DoD employees in the nation, surpassing number two California at 11.2 percent. Virginia employed the largest percentage of civilian personnel, 12.7 percent, ahead of California's 8.5 percent. With the inclusion of military personnel afloat, Virginia employed 10.8 percent of all military DoD employees, ranking it second behind California, but ahead of Texas and North Carolina. (See Tables 1-3 below.)

Top Ten States for Defense Employment
Federal Fiscal Year 2007

Table 1	
Total Defense Employment	
Virginia	11.4%
California	11.2%
Texas	9.1%
North Carolina	6.8%
Georgia	5.8%
Florida	4.5%
Washington	4.3%
Hawaii	3.4%
Maryland	3.3%
Kentucky	2.7%
Top 10 Total	62.5%

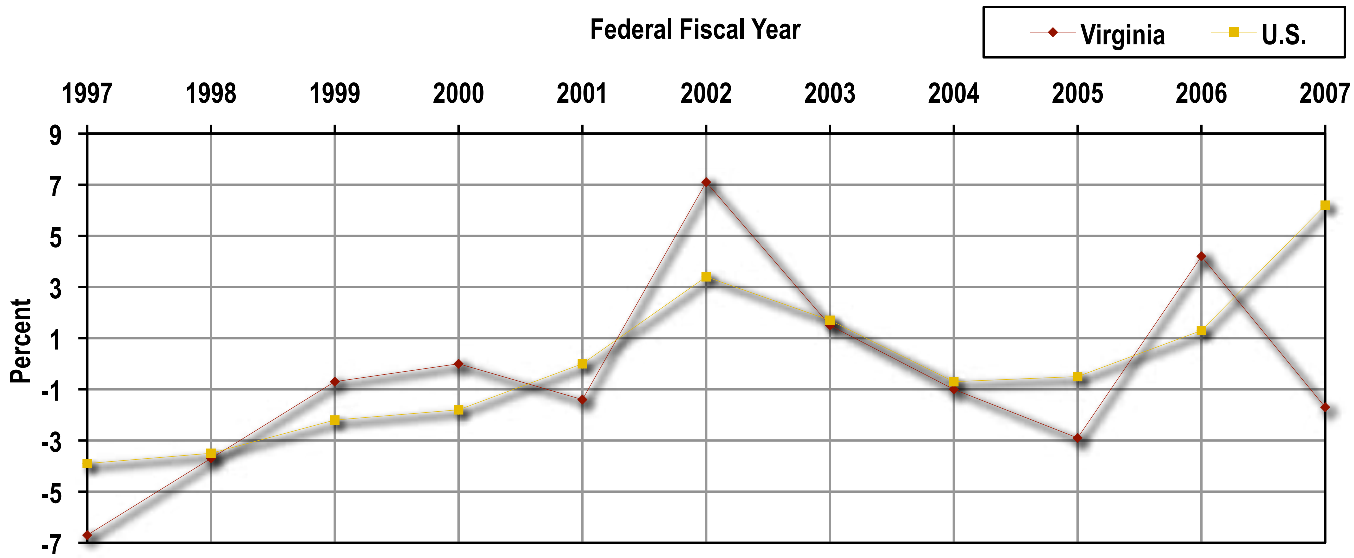
Table 2	
Civilian Defense Employment	
Virginia	12.7%
California	8.5%
Texas	6.5%
Georgia	5.3%
Maryland	4.8%
Florida	4.1%
Pennsylvania	3.9%
Washington	3.8%
Alabama	3.6%
Ohio	3.4%
Top 10 Total	56.6%

Table 3	
Military Employment	
California	12.7%
Virginia	10.8%
Texas	10.5%
North Carolina	8.9%
Georgia	6.0%
Florida	4.8%
Washington	4.5%
Hawaii	3.9%
Kentucky	3.4%
South Carolina	3.3%
Top 10 Total	68.8%

Like the nation, total DoD employment in Virginia had risen as a result of the war in Iraq and Afghanistan. However, for the first time since FY 2001, Virginia DoD employment fell, while national employment increased (See Figure 1). At 1.7 percent, Virginia's decline was less than half of last fiscal year's increase. The Navy experienced a large decrease, while the Army and Air Force showed small increases. It is important to note that these are the normal ups and downs of defense employment and not part of the Base Realignment and Closure Commission (BRAC) process, whose changes will not begin until 2009.

Change in DoD Employment—Virginia vs. U.S.

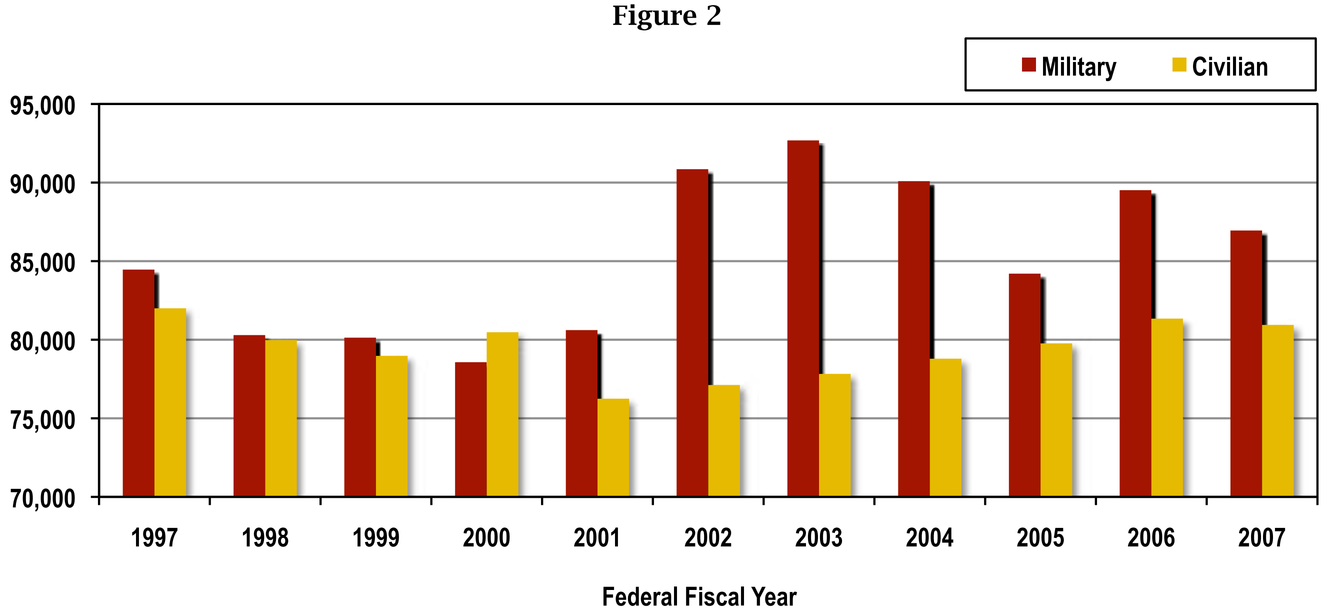
Figure 1



In FY 2007, both DoD civilian and military employment decreased in Virginia (See Figure 2). The 0.5 percent decrease in FY 2007 DoD civilian employment reversed a five-year trend, leaving it at the FY 2000 level. DoD military employment decreased significantly; however, the decline was less than half of last year's increase, putting the level slightly above the average of fiscal years 1997 through 2006.

Military vs. Civilian Employment in Virginia

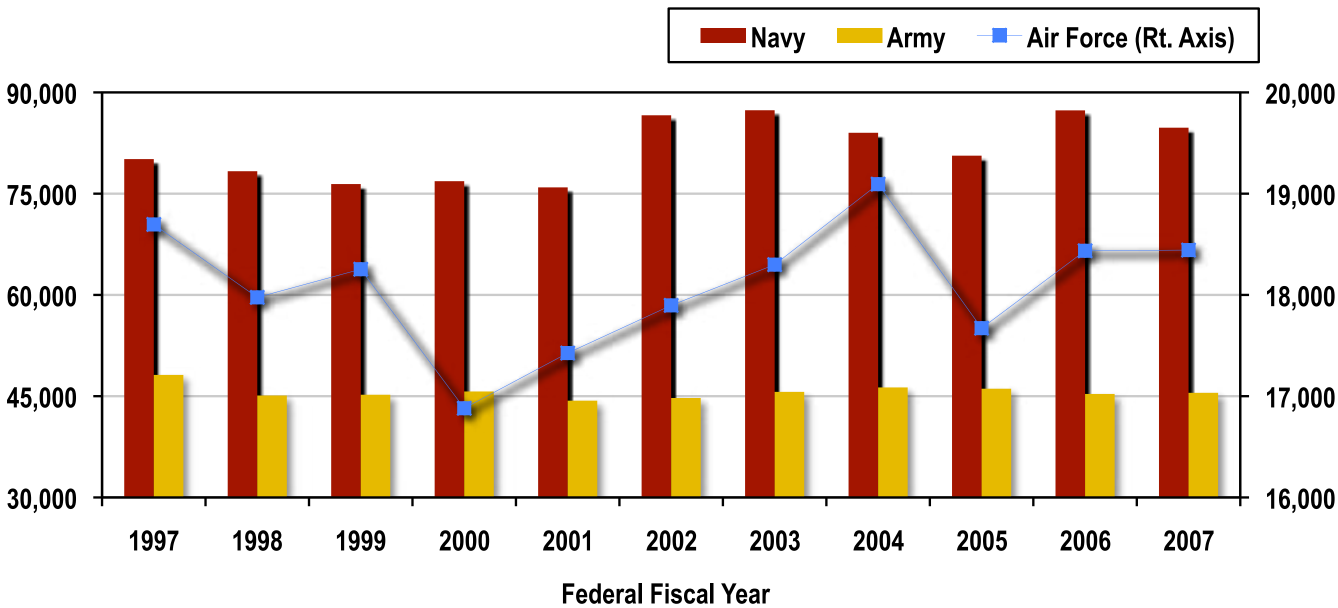
Figure 2



The Navy is the largest service branch in Virginia, accounting for just over half of total DoD employment (See Figure 3). Excluding the shipboard personnel, Navy employment fell 2.9 percent in FY 2007, with large losses in Hampton Roads exceeding gains in the other three regions—Northern Virginia, Richmond, and remainder of state. Navy employment is essentially the same as its FY 2004 level. Army employment accounts for more than one-fourth of total DoD employment. While Army employment declined over the FY 1997-2007 period, the path has been uneven. In FY 2007, Army employment rose 0.4 percent, but it remains below FY 1997's level. Air Force employment accounts for 11 percent of total DoD employment. All but a few hundred of the Air Force employment is in Hampton Roads and Northern Virginia, with over 53 percent in Langley AFB. Air Force employment was essentially unchanged from the previous fiscal year and remains below it peak level of FY 2004.

DoD Employment in Virginia by Service Branch

Figure 3



In Hampton Roads, the large decrease in Navy military personnel in Norfolk reflects the planned deactivation of two submarines, the *Minneapolis/St. Paul* and the *Hyman G. Rickover*, and the transfer of another, the *Hampton*, to San Diego. Virginia Beach also had large losses in Navy military personnel, while Fort Eustis and Fort Story had small gains in Army military personnel. The combined areas of Hampton Roads and Northern Virginia account for just under 75 percent of Virginia's total DoD employment. Northern Virginia's net loss of almost 800 was the fourth straight decline, but its share of employment has increased marginally to 35.8 percent, still well below its peak of 45.7 percent in FY 1994. (Table 4 on page 35 shows Department of Defense Military and Civilian Employment by Service Branch, Region, and Locality/Installation.)

In the Hampton Roads area, the Navy is the predominant employer, with the largest concentration of naval employment in Norfolk and Virginia Beach, which together account for about 90 percent of naval employment. Army employment rose by 322, while Air Force employment fell by 333. In Northern Virginia, Army employment fell to under 35 percent of the area's DoD employment, while gains in the Navy increased its share to over 29 percent. Over 87 percent of Northern Virginia's Air Force employment is in Arlington, over 96 percent of the region's Navy employment is located in Quantico and Arlington, and 98 percent of its Army employment is spread among Alexandria, Arlington, Fort Belvoir, and Fort Myer. DoD employment in Northern Virginia fell 1.3 percent in FY 2007, with a large decrease in Army military personnel in Arlington being partially offset by increases in Navy/Marine Corps military personnel at Arlington and Quantico. The Richmond area's employment decreased by almost 200 or 1.4 percent. Gains at Fort Lee, mainly in Army military personnel, were offset by losses in Other civilian personnel at Richmond. The Other location's employment rose almost 3,000, with most of the gain in Army military personnel.

[1]As reported by the DoD Washington Headquarters Services Directorate for Information, Operations, and Reports (DIOR). Includes only full-time, permanently assigned military and civilian personnel and *excludes* part-time, temporary, and transitional personnel, and National Guard and military reserves. Personnel on military vessels home-ported in the state (in Virginia, about 39,000) are *included* in Tables 1, 3, and 4, but, for historical comparisons, excluded from the graphs.

Table 4:
2007 Department of Defense Employment—Military and Civilian by Service Branch, Region, and Locality/Installation

	Total Defense					Military Personnel				Civilian Personnel				
	Total	Army	Navy (1)(2)	Air Force	Other (3)	Total	Army	Navy (1)(2)	Air Force	Total	Army	Navy (1)	Air Force	Other (3)
Virginia	**206,892**	**45,498**	**123,774**	**18,443**	**19,177**	**125,950**	**24,601**	**87,622**	**13,727**	**80,942**	**20,897**	**36,152**	**4,716**	**19,177**
Hampton Roads	**102,211**	**9,581**	**81,104**	**10,258**	**1,268**	**88,069**	**6,716**	**73,075**	**8,278**	**14,142**	**2,865**	**8,029**	**1,980**	**1,268**
Chesapeake	542	1	540	-	1	407	-	407	-	135	1	133	-	1
Ft. Eustis	8,002	7,841	15	2	144	5,552	5,541	11	-	2,450	2,300	4	2	144
Ft. Story	913	839	74	-	-	842	768	74	-	71	71	-	-	-
Hampton	139	74	5	5	55	4	-	1	3	135	74	4	2	55
Langley AFB	10,048	30	5	9,881	132	7,948	6	3	7,939	2,100	24	2	1,942	132
Nansemond	224	-	224	-	-	-	-	-	-	224	-	224	-	-
Newport News	633	122	475	3	33	218	122	93	3	415	-	382	-	33
Norfolk	53,388	623	51,993	271	501	51,413	279	50,894	240	1,975	344	1,099	31	501
Portsmouth	3,604	23	3,493	15	73	3,095	-	3,080	15	509	23	413	-	73
Suffolk	436	13	354	67	2	90	-	25	65	346	13	329	2	2
Virginia Beach	20,915	12	20,583	6	314	15,300	-	15,295	5	5,615	12	5,288	1	314
Williamsburg	146	3	141	2	-	66	-	64	2	80	3	77	-	-
Yorktown	3,221	-	3,202	6	13	3,134	-	3,128	6	87	-	74	-	13
Northern Virginia	**60,111**	**20,878**	**17,664**	**7,709**	**13,859**	**26,578**	**8,430**	**12,889**	**5,259**	**33,533**	**12,448**	**4,776**	**2,450**	**13,859**
Alexandria	7,816	7,004	150	108	554	4,566	4,373	117	76	3,250	2,631	33	32	554
Arlington	23,793	4,110	5,932	6,735	7,016	8,629	-	4,114	4,515	15,164	4,110	1,818	2,220	7,016
Chantilly	211	3	173	-	35	133	-	133	-	78	3	40	-	35
Fairfax	218	2	4	184	28	185	-	2	183	33	2	2	1	28
Falls Church	2,682	388	33	183	2,078	310	138	17	155	2,372	250	16	28	2,078
Ft. Belvoir	10,216	6,943	161	309	2,803	2,456	2,078	142	236	7,760	4,865	19	73	2,803
Ft. Myer	2,459	2,344	-	-	115	1,841	1,841	-	-	618	503	-	-	115
Manassas	162	1	10	2	149	3	-	1	2	159	1	9	-	149
Quantico	11,444	3	11,086	31	324	8,393	-	8,362	31	3,051	3	2,724	-	324
Reston	112	2		54	55	47	-	-	47	65	2	1	7	55
Rosslyn	431	59	1	99	272	10	-	-	10	421	59	1	89	272
Springfield	444	14	1	2	427	2	-	-	2	442	14	1	-	427
Woodbridge	123	5	113	2	3	3	-	1	2	120	5	112	-	3
Richmond	**12,235**	**7,912**	**656**	**223**	**3,444**	**6,732**	**6,036**	**636**	**60**	**5,503**	**1,876**	**20**	**163**	**3,444**
Ft. Lee	8,845	7,668	245	23	909	6,299	6,036	240	23	2,546	1,632	5	-	909
Richmond	3,134	142	411	46	2,535	433	-	396	37	2,701	142	15	9	2,535
Sandston	256	102	-	154	-	-	-	-	-	256	102	-	154	-
Remainder of State	**32,335**	**7,127**	**24,349**	**253**	**606**	**4,571**	**3,419**	**1,022**	**130**	**27,764**	**3,708**	**23,327**	**123**	**606**
Charlottesville	698	627	36	30	5	63	-	34	29	635	627	2	1	5
Dahlgren	4,685	-	4,532	79	74	812	-	779	33	3,873	-	3,753	46	74
Radford	104	101	-	-	3	-	-	-	-	104	101	-	-	3
Wallops Flight Ctr.	123	-	123	-	-	69	-	69	-	54	-	54	-	-
Winchester	326	324	-	2	-	2	-	-	2	324	324	-	-	-
Other	26,399	6,075	19,658	142	524	3,625	3,419	140	66	22,774	2,656	19,518	76	524

Source: DoD Distribution of Personnel by State and by Selected Locations, Washington Headquarters Services Directorate for Information, Operations and Reports (DIOR)
(1) Includes Marine Corps personnel.
(2) Includes military personnel afloat.
(3) The other category within the civilian sector consists of all DoD personnel not classified as Army, Navy/Marine Corps, or Air Force.

Performance of Indicators Over the Business Cycle

For those interested in studying the business cycle in Virginia, this publication includes several of the economic time series for which data is readily available on a monthly basis. From time to time, new series will be added and, if necessary, others presently included will be discontinued.

Business Cycle Turning Points

The beginning of a recession is defined as the month when aggregate economic activity in the U.S. reaches a cyclical high, from which it begins to turn down, and the end as the month when it reaches a cyclical low, from which it begins to turn up. On November 26, 2001, the National Bureau of Economic Research (NBER) announced a recession had begun in March 2001. On July 17, 2003, NBER announced the recession ended in November 2001. The NBER on December 1, 2008, announced a recession had begun in December 2007.

Seasonal Adjustment

To correlate changes in a time series and changes in the business cycle, it is desirable to eliminate, insofar as possible, the effect of irrelevant factors from the data comprising the series. All series currently published in the *Virginia Economic Indicators* have been adjusted to minimize regular seasonal fluctuations in the data in order to show only activity related to the business cycle.

Historical Graphs

Historical graphs are published in the back of the fourth quarter issue for each year.

DATA SOURCES

U.S. Census Bureau:
- Single Family Housing Permits

Virginia Department of Motor Vehicles:
- New Vehicle Registrations

Virginia Department of Taxation:
- Deflated Taxable Retail Sales
- Taxable Retail Sales

Virginia Employment Commission:
- Average Hourly Earnings
- Average Weekly Earnings
- Average Weekly Hours
- Average Weekly Initial Claims
- Deflated Average Hourly Earnings
- Deflated Average Weekly Earnings
- Insured Unemployment Rate
- Manufacturing Employment
- Nonagricultural Wage and Salary Employment
- Total Production Hours
- Total Unemployment Rate
- Unemployment Insurance Final Payments

Virginia State Corporation Commission:
- New Business Incorporations

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